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Aboriginal health in NSW

How can we do things differently in Aboriginal health? The same challenges seen through new eyes

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There are currently about 156 000 Aboriginal and Torres Strait Islander people living in New South Wales (NSW), representing 2.3% of the total NSW population, and equating to 29% of the total Australian Aboriginal population.¹ In this special issue of the *NSW Public Health Bulletin*, in accordance with NSW Health policy, Aboriginal and Torres Strait Islander people are referred to as Aboriginal in recognition of the fact that Aboriginal people are the original inhabitants of NSW.

It is well known that Aboriginal people continue to experience poorer health than the general population. When the new state government took office in March 2011, they gave a commitment to continue to work on closing the gap in Aboriginal health inequity. This commitment specifically mentioned that the NSW Government would:

1. develop a 10-year Aboriginal Health Plan for NSW
2. hold an Aboriginal Health and Wellbeing forum in their first year of office
3. hold, each year, an annual progress meeting with Aboriginal community-based organisations and NSW Health representatives
4. produce an annual progress report that measures the performance of the health system against the Closing the Gap agenda.²

It is now a year since that commitment was provided. So where are we up to, what successes have we seen, and where do we go from here? This special issue of the *Bulletin*

provides an opportunity to take stock, and offers a number of perspectives on working in Aboriginal health and doing it better in the future. We discuss the intentions behind the Aboriginal Health Plan that is currently in development and note the themes emerging from the consultation and how closely these mirror the themes in each of the papers presented in this issue.

A time for major reform

Recent reviews on Aboriginal disadvantage and Aboriginal programs in NSW have concluded that there is a need for fresh approaches. The NSW Auditor General, when reviewing the former *Two Ways Together – NSW Aboriginal Affairs Plan*,³ noted that: ‘while there were some gains there remain significant challenges requiring redress.’⁴ The NSW Ombudsman, in the recently released report, *Addressing Aboriginal Disadvantage: the need to do things differently*⁵ indicated that

...simply directing additional funds to more Aboriginal programs and services is not the solution. Rather, it is time for major reform in this state in relation to the overall approach to overall Aboriginal affairs.

As a health system and service providers we must share the same sentiment for the need to reform and overhaul the way we do our business to ensure that it is culturally responsive and provides a high quality service to Aboriginal people, including people working in the sector.

Partnership is key

An underpinning principle to the way we work in Aboriginal health in NSW is the importance of working together with Aboriginal people, communities and organisations.

In particular, that includes the way the public health system works with the Aboriginal Community Controlled Health Services. The article by Sandra Bailey and Jenny Hunt describes the history of that partnership, and the role of partnerships with Aboriginal people in all aspects of our work. It is fundamental that we involve Aboriginal communities in the design of services, programs and policies through to the implementation, monitoring, reporting and evaluation of these initiatives, and that these collaborations are real partnerships that are mutually respectful. Many of the other articles in this special issue also identify the importance of partnerships to the success of the agenda to close the gap in health disadvantage for Aboriginal people.

Effective, inclusive and meaningful planning

As part of the government's commitment, we're now more than half way through developing a new 10-year Aboriginal Health Plan for NSW. The paper by Parter, Gassner, Atkinson and McKendrick describes the consultation process being used, and highlights the importance of the strong involvement of Aboriginal people and communities throughout the planning process. It also emphasises the need to think differently to shift commonly held values, beliefs and biases and to challenge the status quo.⁶

Monitoring, evaluation and research

As well as planning to do good things, it is important to have processes to monitor progress, assess effectiveness and produce evidence of what works in the Aboriginal health context. This monitoring process should occur at every level of the system, for state, through regional and local services to individual programs and projects. All of the articles in this issue refer to the evidence that has informed their work, and many describe their approaches to evaluating work. The article by Stewart et al. takes a view from the Ministry of Health and details the development of a strategic approach to enhancing capacity for research and evaluation in NSW. The article by Maher et al. provides a program-specific example, assessing the data on rates of cataract surgery to identify barriers to access to eye health services for Aboriginal people in western NSW.

Putting it all together – developing specific programs that work

Of course, in seeking new solutions, we need to be careful not to abandon excellent work that is already underway. Other articles in this issue showcase some of the efforts occurring in NSW where people have already successfully embraced the need to do things differently. An example is the Aboriginal Maternal and Infant Health Service (AMIHS), now over a decade old. Evaluation of the AMIHS provided evidence of success and identified opportunities for further improvements, leading to recent

expansions of and enhancements to the AMIHS. The article by Murphy and Best describes the history, the approach and the outcomes achieved by the AMIHS.

Another statewide program that has developed a specific model of care for Aboriginal people is described in the paper by Gordon and Richards. The Chronic Care for Aboriginal People program, like the AMIHS, shows the importance of partnerships, planning and evaluation, and the need for effective linking of services within and beyond the public health system, to support a smooth journey for Aboriginal people who must access many different providers over the course of their chronic illnesses.

At a more localised level, the paper by Alperstein and Dyer describes the development of a collaborative approach to child wellbeing in one region. Once again, the approach is based on meaningful partnerships (including intersectoral collaboration), uses careful planning, sets up regular monitoring and requires a long-term view.

And finally, the collection of snapshots of statewide programs offers a taste of the breadth of work required in order to close the gap in health inequity for Aboriginal people. It is only through multiple strategies that we can address the complexity of issues involved in Aboriginal health.

Respecting culture and tackling racism

When approaching the development of the Aboriginal Health Plan, we asked ourselves why the unacceptable health gap between Aboriginal and non-Aboriginal people still existed and what should be done differently to make a change. Despite small gains, these questions remain fundamental in a health system and in health service provision that is not meeting the specific cultural and health needs of Aboriginal people and communities. The article from the Hunter New England Health Aboriginal and Torres Strait Islander Strategic Leadership Committee tells the story of a mainstream organisation that has set itself the task of improving its ability to meet the cultural needs of Aboriginal people at a whole of organisation level. Such organisational change requires a long-term commitment, a multitude of strategies and strong leadership. Once again, partnership is a key component for success.

Where to from here?

All the articles in this special issue provide indicators to the future of Aboriginal health. Reforming the system in ways that increase our ability to close the health gap is a big vision and requires all of us to re-examine our thinking. We must continue to determine the challenges, examine and identify the key areas in Aboriginal health where a small shift can produce a large change. We must all move towards changing the way we think and work with Aboriginal people and communities by changing our systems,

processes, procedures and practices. We can learn from the past, and spread the good ideas. We hope to see this changed approach reflected in our 10-year Aboriginal Health Plan when it is finalised later this year.

We hope that you enjoy this issue.

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Successful partnerships are the key to improving Aboriginal health

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Abstract: Partnership is a process that must be recognised as a fundamental part of any strategy for improving health outcomes for Aboriginal people. Addressing the inequities in health outcomes between Aboriginal people and other Australians will require a sustained, coordinated and well-informed approach that works to a set of goals and targets developed with input from the Aboriginal community. Partnerships provide the most effective mechanism for obtaining this essential input from Aboriginal communities and their representative organisations, enabling Aboriginal people to have an influence at all stages of the health-care process. Within the health sector, effective partnerships harness the efforts of governments and the expertise of Aboriginal Community Controlled Health Services, which offer the most effective means of delivering comprehensive primary health care to Aboriginal people.

Partnership is a process that must be recognised as fundamental to any strategy for improving health outcomes for Aboriginal people, both in New South Wales (NSW) and Australia as a whole. In 2011, the NSW Government reaffirmed its commitment to Aboriginal health by pledging to work with Aboriginal organisations, communities and advocates to devise a 10-year Aboriginal Health Plan for the State.¹ In many ways NSW is at the beginning of a new era, in which a great deal of attention and energy is being directed across all sectors to close health gaps for Aboriginal people.

Addressing the inequities in health outcomes between Aboriginal people and other Australians, however, will require a sustained, coordinated and well-informed approach, one which is underpinned by long-term collaborations that

work to a set of goals and targets developed in partnership with the Aboriginal community. Partnerships provide the most effective mechanism for obtaining this essential input from Aboriginal communities and their representative organisations, enabling Aboriginal people to have an influence at all stages of the health-care process.

Within the health sector, productive partnerships can effect positive change by harnessing the efforts of governments and health providers, along with the experience and expertise of Aboriginal Community Controlled Health Services (ACCHSs). ACCHSs are not only the most effective means of delivering comprehensive primary health care to Aboriginal people² but are also a critical component of the overall health system.^{3,4} Such partnerships are designed to bring the experience and expertise of the Aboriginal community to bear at every level of the health-care system, including the identification of key issues, the development of policy solutions and the structuring and delivery of services.

However, a practical approach to partnership also means recognising that all parties in a partnership are not the same, that there are different roles and responsibilities – and different accountabilities. With consultations and submissions for the development of the 10-year Aboriginal Health Plan for NSW currently underway, the Aboriginal Health and Medical Research Council of NSW (AH&MRC) believes it worthwhile to highlight in this article some of the key attributes of successful partnerships, both in general and specifically with the ACCHS sector.

Advocating a partnership approach

A partnership approach has long been advocated by government and ACCHSs as essential to addressing Aboriginal health inequity. In 1989, Australia developed its first National Aboriginal Health Strategy, which was the result of extensive consultations with Aboriginal communities and governments around the country.⁵ Before the development of this national strategy, the Commonwealth Government had no strategic approach to tackle the challenges surrounding Aboriginal health.

The Strategy not only reinforced the important role of ACCHSs in improving Aboriginal health, it also criticised the ad hoc approaches to Aboriginal health which were then prevalent. With a mandate to improve coordination and achieve better health outcomes, the *National Aboriginal Health Strategy* strongly recommended better partnerships

between Commonwealth and state governments, and between the Aboriginal community and government at all levels.

Following the recommendations set out in the *National Aboriginal Health Strategy*, in 1995 the AH&MRC and the NSW Government led the country by establishing the first *NSW Aboriginal Health Partnership Agreement*.⁶ Guided by the principle of self-determination, the Agreement emphasises a partnership approach and the importance of intersectoral collaboration. The Agreement also recommends that the partnership model be replicated at all levels of the health-care process, down to regional and local levels. Launched with bipartisan support, the *NSW Aboriginal Health Partnership Agreement* endures today and its founding principles remain unchanged.

In addition to the establishment of the *NSW Aboriginal Health Partnership Agreement*, in 2010 the NSW Government signed *The Statement of Intent to Achieve Equality in Health Status and Life Expectancy Between Aboriginal and Torres Strait Islander Peoples and Non-Indigenous Australians*.⁷ As with the *NSW Aboriginal Health Partnership Agreement*, the Statement of Intent also achieved bipartisan support in committing the NSW Government to work in new, more productive partnerships with Aboriginal people and their representative organisations.

Partnerships and self-determination

There are sound reasons why such initiatives recommend partnerships with Aboriginal communities and their representative organisations: the benefits of adopting a partnership approach are well documented, both in Australia^{8–10} and internationally.^{11,12}

Within a local context, a partnership approach that incorporates proper recognition of the right of self-determination for Aboriginal people offers a solid foundation for improving collaborative efforts in the area of Aboriginal health.

The United Nations Declaration on the Rights of Indigenous Peoples lays out the principles of self-determination. Adopted in 2007, the Declaration upholds the rights of Indigenous peoples and calls on states to consult and cooperate in good faith with the peoples concerned through their own representative institutions in order to obtain their ‘free, prior and informed consent before adopting and implementing legislative or administrative measures that may affect them.’¹³ The Declaration defines the concept of self-determination for Indigenous peoples, in Articles 3, 4 and 5:¹³

Article 3

Indigenous peoples have the right to self-determination. By virtue of that right they freely determine their

political status and freely pursue their economic, social and cultural development.

Article 4

Indigenous peoples, in exercising their right to self-determination, have the right to autonomy or self-government in matters relating to their internal and local affairs, as well as ways and means for financing their autonomous functions.

Article 5

Indigenous peoples have the right to maintain and strengthen their distinct political, legal, economic, social and cultural institutions, while retaining their right to participate fully, if they so choose, in the political, economic, social and cultural life of the State.

Partnerships with Aboriginal organisations are far more likely to be successful if the principle of self-determination for Aboriginal people and their community organisations is honoured.^{14–16} Indeed, self-determination is the principle upon which the ACCHS sector was founded, extending traditions that are thousands of years old, wherein Aboriginal people have long maintained the health and wellbeing of their own communities. The first ACCHS were established in Australia 40 years ago on the basis that Aboriginal people needed to take health matters into their own hands as mainstream services continued to fail to help their communities.^{17,18}

There is substantial evidence to support the proposition that health benefits follow self-determination, which can yield positive reinforcement, cultural empowerment, improved self-esteem and better overall health outcomes.^{19–22}

Key principles of successful partnerships

The term partnership is very common these days, but it can mean very different things to different people. The principles of effective partnerships in the area of Aboriginal health have been recently articulated by the National Aboriginal Community Controlled Health Organisation (NACCHO), together with the Australian Human Rights Commission (previously the Human Rights and Equal Opportunity Commission), Oxfam and other organisations involved in the National Close the Gap campaign:

*Genuine partnership exists when two or more parties join together to work toward a common goal; it is a process of shared decision making, of negotiated outcomes, and of mutual respect. It is an ongoing process, and one that requires sustained effort to maintain over time. At its heart, working in partnership means that both parties have genuine influence – not only in identifying issues and developing solutions, but also in determining the form of partnership.*²³

In short, partnership is more than consultation and more than acting in an advisory capacity. A successful partnership requires considerable time and effort to develop, and should occur at all stages, from initiation to development to implementation and evaluation.

Key characteristics of successful partnerships include²³:

- Respect, trust and mutual understanding between all partners
- An acceptance that different parties will have different roles and responsibilities
- Provision of adequate resources to all partners
- Realistic and specific objectives, usually ones that each partner organisation would not be able to meet by working alone
- A process of review and evaluation, which is both qualitative and quantitative, and which assesses the partnership process as well as its outcomes.

Successful partnerships can also be defined by what they are *not*. Healthy, productive partnerships do *not* involve²³:

- Approaches that rely only on advisory boards and closed-door decision making
- One party independently deciding on a course of action and presenting it to the other for ratification
- Partners making public statements or developing new initiatives independently and without having first discussed the issue with the other partner.

In addition to these characteristics, partnerships in the area of Aboriginal health will be meaningful only if they are transparent and involve the relevant bodies that represent Aboriginal people.

Partnerships are critical to achieve health equity for Aboriginal people, but in order for them to be productive close attention must be paid to any power imbalances that exist. Aboriginal organisations, for example, are frequently in the position of being in partnership arrangements with organisations that fund them, which inherently influences the function and dynamics of the partnership.²⁴ This issue needs to be acknowledged and addressed from the outset if a partnership is to be equal.

Common goals

ACCHSs and mainstream health-care providers undoubtedly share the goal of improving Aboriginal health. The AH&MRC advocates meeting this common goal by adopting a rights-based approach to Aboriginal health initiatives, one in which human rights provide a framework for addressing the consequences of the health inequality experienced by Aboriginal people. Partnerships that are informed by a rights-based approach employ human rights standards to guide policy making and to influence the design, delivery and monitoring and evaluation of health

programs and services.²⁵ These standards include recognising not only the underlying causes of health inequity, but also how these causes are interconnected to other issues.²⁵

Achieving health equity for NSW will require governments, the ACCHS sector and other health services to work together towards the goal of a NSW health system that is competent to provide good access and good care for Aboriginal people on the basis of strong partnerships with Aboriginal health organisations. Reaching this goal will require a partnership process that:

- embodies the principles of self-determination
- incorporates a human rights approach to redressing Aboriginal disadvantage and to provide sufficient government accountability
- describes clearly the services required to improve the health of Aboriginal peoples in NSW
- sets out the roles and responsibilities of staff, management, organisations and stakeholders at every level of the system.

Conclusion

To achieve sustainable progress in addressing health inequities, Aboriginal people must be recognised as distinct and equal partners not only in words but in action. By agreeing on a shared vision and by working strategically in partnership at every level, NSW can and will develop and expand the scope, versatility and capacity of health services to improve the health of Aboriginal people.

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Developing an Aboriginal Health Plan for NSW: the consultation process

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Abstract: In partnership with the Aboriginal Health and Medical Research Council of NSW (AH&MRC), the NSW Ministry of Health is developing a 10-year Aboriginal Health Plan for NSW. Recent reports have highlighted the need for significant systemic and structural change, coupled with genuine engagement with Aboriginal people. A whole health-system approach has been adopted and is examining all the interdependent and influencing elements that impede or facilitate effective health outcomes for Aboriginal people. The collaboration will develop a new strategic framework that will provide clear direction concerning how we address Aboriginal health in NSW. We have done this by seeking genuine engagement and partnership with Aboriginal people, organisations and communities. A phased approach has been used to develop the Plan. This paper describes the first phase of a two-phased approach. A discussion paper was released on National Close the Gap Day, 22 March 2012.

Business and human endeavours are systems... we tend to focus on snapshots of isolated parts of the system, and wonder why our deepest problems never get solved.
Peter Senge¹

The New South Wales (NSW) Government made election commitments to closing the gap in Aboriginal health outcomes. Central to this commitment is the development of a 10-year Aboriginal Health Plan. The last NSW Aboriginal health policy and strategy, *Ensuring Progress in Aboriginal Health: A Policy for the NSW Health System*,

and *NSW Aboriginal Health Strategic Plan: Better Health Good Health Care*, were published in 1999.² There is currently no strategic framework to guide action to improve health outcomes of Aboriginal people in NSW and to address the unacceptable discrepancy in life expectancy between Aboriginal and non-Aboriginal people.

The need for systemic change to improve health outcomes of Aboriginal people is reflected in a number of recent reports such as the NSW Ombudsman's *Addressing Aboriginal disadvantage: the need to do things differently*³ and the Australian Government's *Strategic Review of Indigenous Expenditure*.⁴ Historic responses have been unsuccessful in closing the gap in health outcomes for Aboriginal people. Rather than duplicating current action the NSW Ministry of Health is considering how to both work together differently and find new ways to address the causes of disadvantage. This paper describes the first phase of the development of a 10-year Aboriginal Health Plan for NSW.

Designing the consultation process

The development of the Plan acknowledged the need to ensure genuine engagement and empowerment of Aboriginal people throughout the process. Stuart Rees, Director of the Sydney Peace Foundation and former member of the NSW Reconciliation Committee, states that this engagement should go beyond the 'rhetoric of empowerment, which may merely disguise maintenance of a disempowering status quo' and 'seek out the people whose views are seldom heard'.⁵ This approach recognises that consultation processes have not always considered the needs of Aboriginal people adequately,⁶⁻⁸ and reflects the significant issues raised in the NSW Ombudsman's report which noted that 'government needs to adopt a very different way of doing business with Aboriginal communities'.³

In designing the consultation and engagement process, the NSW Ministry of Health partnered with the Aboriginal Health and Medical Research Council of NSW (AH&MRC) representing the Aboriginal community controlled health sector, to ensure that the views of Aboriginal people were heard throughout the entire process. The Ministry involved the AH&MRC as partners in decision making in relation to the design and delivery of the consultations. To assist in the consultation, the Ministry engaged Reos Partners, an international organisation that builds capacity for innovative change in complex social systems.

The consultation process (Phase 1)

The consultation process was conducted in three stages:

- interviews with stakeholders
- regional workshops and a forum
- written consultation.

Each stage explored the question: *How can we together transform the way we work and collaborate to significantly improve health outcomes of Aboriginal people across NSW over the next 10 years?*

The interviews with stakeholders

Individual stakeholder interviews were conducted between 13 and 21 October 2011 by Reos Partners. Thirty people were interviewed from the public health system and Aboriginal community controlled health sector. The public health sector participants included a vertical cross-section of the health system from Local Health District Chief Executives and Chairs of Boards, Senior Executive in the Ministry, to program coordinators and front-line workers. Aboriginal community controlled health sector participants included the AH&MRC's 12 community-elected Regional Board Directors.

Approximately half the interviews were with the Aboriginal community controlled health sector, and approximately 70% of those interviewed were Aboriginal people. This representation ensured that Aboriginal people were the dominant voice at the centre of the consultation process, providing input at its earliest stages. This process supported genuine consultation with the Aboriginal community and helped shift the power dynamic from a power-over⁹ to a collaborative partnership approach. This shift in emphasis was recognised during the interview process, as participants acknowledged:

When you look at how things have been done in the past and how things have been forced on people, you realise you must have consultation. Be up-front and honest with people in telling them what's happening.

Interviews like this and the forums that are going to take place after this and getting Aboriginal people throughout the state having their voice heard and being involved in the whole process – is what we need.

The following themes emerged from the interviews:

- connection (relationships, consultation, linking up, trust)
- respect (acknowledgement, equality, safety, attitudes and understanding)
- time
- funding
- workforce (supply, pathways, education, capability)
- leadership
- measurement and reporting
- accountability

- delivery models (holistic health or medical problem, access and cultural safety, prevention and cure, health system delivery)
- outcomes.

The regional workshops

The interviews and emerging themes informed eight regional consultation workshops held in Dubbo, Wagga Wagga, Tamworth, Broken Hill, Nowra, Coffs Harbour and Sydney between 3 and 15 November 2011. Over 200 health professionals and community members attended the workshops convened by the Ministry of Health and the AH&MRC, with attendees equally distributed between representatives of the Aboriginal community controlled health sector and the public health system. To ensure Aboriginal views and perspectives were in the majority, over half the attendees at each workshop were Aboriginal people. This aspect of the consultation workshops was noted by participants:

I think we all talk about real partnership, we've had a practical demonstration of what real partnership starts to be in this room. But you do have to put some rigour in real partnerships.

Workshop design

The approach used in the workshops had been developed over twenty years by Adam Kahane¹⁰ and the team at Reos Partners and others including Otto Scharmer and Peter Senge.¹ Participants were involved in three different components of the workshop:

1. exploring what's currently happening in the health system
2. stepping back from the detail to reflect on the current situation and what is needed
3. identifying new ways of working to create a changed system. Participants focused on addressing opportunities for change, and identified initiatives for positive results in the future.

Ways of talking and listening

The workshops were introduced with participants stating where they were from to provide a context for their life beyond work, and to emphasise an Aboriginal way of relating to people through their connection to land and country. Workshop leaders challenged participants to consider new ways of talking and listening that could lead to genuine inquiry and to understanding different perspectives. One participant commented that this method allowed those in the workshop to start to 'see the same challenges through new eyes'.

Participants reflected:

I need to be more conscious of trying to engage better with Aboriginal people I work with. Listen more,

engage more to be a better advocate and supporting Aboriginal people. Aboriginal health is so often left off the agenda. Taking more responsibility for that. Collaboration and engagement – genuinely respectful and partnering.

We need to keep listening to what Aboriginal people are telling us, especially the Elders who have been around a while.

A small shift can produce a large change

In order to transform the health system to improve health outcomes of Aboriginal people, the workshop participants considered the current situation by examining the inter-connections and relationships between the different parts of a system. This model presents a way to see what is happening based not only on observable events, but also on what has happened over time (patterns); it also identifies underlying structures (structures) and ways of thinking (mental models) that influence the system.

Workshop outcomes

Participants agreed that a simple linear cause and effect relationship did not relate to the complex problem of Aboriginal health inequalities and that it would be more useful to consider multiple causes and multiple effects. Participants were encouraged to consider aspects of change required to shift the system and improve health outcomes of Aboriginal people. These ideas were grouped to provide directions for action.

From the workshop discussions to identify ideas and approaches that would make positive systemic change to Aboriginal health outcomes in NSW over the next 10 years, core themes emerged. These themes will provide the basis for the elements to be included in the 10-year Aboriginal Health Plan:

- Unified vision and definition of Aboriginal health
- Unified and integrated planning and funding framework
- Critical measures of transformation
- Outcome reviews/needs and gaps audits (state and local)
- Joined-up local strategy and action planning
- Workforce – attract, develop, sustain
- Making it happen – joined-up local action and service delivery

At the conclusion of the workshops, participants said:

This was more a spirit building exercise for me, I was hoping to look for something to empower me to move forward. It was more about seeing the experience of my community coming from different areas, I see the beauty of our culture coming from different areas, and even from non-Aboriginal people, the partnership. I saw that today, it rejuvenated the spirits. I want to leave the tiredness, the battles, and realised I don't fight alone.

We need to maintain the shared vision we've experience today to work closely together. To continue to find ways to include the community in solution building.

I'd like to think that we see ourselves as part of a wider team, working together for the same purpose, if problems or issues, we need to discuss and I would like to see an integrated plan as we go forward. There seems to be silos, and never the twain shall meet. They need to be broken down.

NSW Aboriginal Health and Wellbeing Forum

The Minister for Healthy Lifestyles, the Honourable Kevin Humphries MP, and the AH&MRC co-hosted a health and wellbeing forum for senior health leaders in November 2011. The forum expanded the findings of the regional workshops and sought broad agreement regarding the themes for the future. The forum also elicited a number of underpinning principles to guide the development of the Plan. These principles are outlined in Consultation Paper 2.

Written consultation

Along with the workshops, a written consultation process was undertaken. Comments were sought around broad themes. A consultation website was launched which describes the consultation process, reports and data, and provides background information and mechanisms to provide feedback and submissions (see <http://www.health.nsw.gov.au/publichealth/aboriginal/plan/index.asp>).

Next steps

Consultation paper 2 was released in March 2012, and detailed the findings from the interviews, workshops and health and wellbeing forum.¹¹ A discussion paper was released on National Close the Gap Day, 22 March 2012. This paper reflects the earlier consultations and proposes a vision, definition, goal and underpinning principles for how we work and identifies strategic directions to improve Aboriginal health outcomes. A further report synthesising the written submissions will complete phase 1 of the consultation process to develop the new 10-year Aboriginal Health Plan for NSW.

The feedback from the second phase of consultation informs the draft Aboriginal Health Plan. Details of phase 2 of the consultation process can be found online at:

<http://www.health.nsw.gov.au/publichealth/aboriginal/plan/index.asp>.

Submissions to the consultation process can be made on this website or by email to: aboriginalconsultation@doh.health.nsw.gov.au.

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Working towards a 10-Year Aboriginal Health Plan: the Centre for Aboriginal Health initiatives

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The Centre for Aboriginal Health within the NSW Ministry of Health is responsible for policy development and strategic planning aimed at improving the health of Aboriginal people in NSW. The work of the Centre is guided by both national and NSW policies. In 2007, the Council of Australian Governments (COAG) agreed to a partnership between all levels of government with the aim of addressing Aboriginal and Torres Strait Islander health disadvantage through the *National Indigenous Reform Agreement (NIRA)*.¹ The Agreement includes objectives, outcomes, outputs, performance indicators and performance benchmarks agreed to by COAG, and links to other national agreements such as the \$1.58 billion *National Partnership Agreement on Closing the Gap in Indigenous Health Outcomes*.² The NSW Government committed \$180.38 million over 4 years towards this agreement, to be implemented through the Centre for Aboriginal Health, including coordinating the delivery of a range of initiatives involving Local Health Districts, Aboriginal Community Controlled Health Services and the Aboriginal Health and Medical Research Council NSW (AH&MRC).

In 2011 the NSW Government released *NSW 2021*,³ a state plan in which priority health issues and targets for achieving improvements to Aboriginal health are identified. Also in 2011, the NSW Government committed to the development of a 10-year Aboriginal health plan for NSW which the Centre for Aboriginal Health, in partnership with the AH&MRC, is developing through statewide consultations.

To meet these policy commitments, the Centre for Aboriginal Health works in partnership with other NSW Ministry of Health branches to ensure statewide policies and programs meet the needs of Aboriginal people, including the Aboriginal Maternal and Infant Health Service, and the Chronic Care for Aboriginal People program (both of which are highlighted in this special edition) as well as programs that target tobacco, injury, workforce, housing and oral health. The Centre also develops specific Aboriginal health policies and programs needed to address gaps in

the system that may not be the clear responsibility of other branches.

The following six short reports describe programs that address health promotion, family health, ear health, chronic disease, and improving data quality in both NSW hospitals and Aboriginal Community Controlled Health Services. These examples highlight different strategies used for engaging with the health system, including:

- Strategic policy development: The *NSW Health Aboriginal Family Health Strategy*⁴ and *Aboriginal and Torres Strait Islander Origin – Recording of information of patients and clients* (Policy Directive 2005–547)⁵
- Specific program funding for priority areas: Health promotion program in Local Health Districts, the Chronic Care Service Enhancement Program in Aboriginal Community Controlled Health Services, and population health Ear Health program
- Research funding to develop evidence: Improving identification of Aboriginal patients and the cultural competency of the health workforce in NSW hospitals.

Identifying the suitability and effectiveness of these different strategies for achieving health gains in different areas will be important for the implementation of the 10-year Aboriginal health plan. Strategic policy and effective monitoring and accountability systems will be of increasing importance as responsibility for achieving Aboriginal health gains is further devolved to Local Health Districts. The coordination of statewide programs that specifically target equity issues across the health system for meeting the needs of Aboriginal people will also remain critical for developing evidence of best practice. The implementation of the same program in more than one Local Health District, Aboriginal Community Controlled Health Service or community provides opportunities for rigorous evaluation to determine the effectiveness of the program in improving health service delivery and health outcomes. The evidence produced can then be used to inform programs across NSW.

The Centre for Aboriginal Health continues to work to create opportunities to close the gap in health between Aboriginal and non-Aboriginal people by working in partnership with the Aboriginal Community Controlled Health Services and Local Health Districts. This collection of reports describes progress being made in addressing key Aboriginal health issues in NSW.

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NSW Aboriginal Health Promotion Program: lessons learned and ways forward

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Chronic disease is one of the most significant health issues in Aboriginal communities throughout Australia. Chronic conditions such as cardiovascular disease, diabetes, chronic respiratory disease, and cancer are responsible for 70% of the health gap (ill health and mortality) between Aboriginal and non-Aboriginal people in terms of disability adjusted life years.^{1,2}

The Aboriginal Health Promotion Program was developed in 1986. The aim of the Program is to prevent the onset of chronic disease and injury in the Aboriginal population in NSW. The program has primarily administered grants to Aboriginal Community Controlled Health Services and Local Health Districts to support Aboriginal health promotion projects addressing key local and state priorities.

An example of a project funded under the program was the Shake-a-leg Program, a schools-based health promotion program targeting primary and secondary schools in the Hunter New England region. The program aimed to reduce preventable health conditions in Aboriginal children through better understanding of disease processes and prevention in the home environment. An evaluation found a noticeable change in the health behaviours of the children and increased knowledge of parents about the program.

Reviews undertaken in 2007 and 2010 recommended refocusing the Aboriginal Health Promotion Program to align with the key priorities of the *National Partnership Agreement on Closing the Gap in Indigenous Health Outcomes* and the *National Partnership Agreement on Preventive Health*. The reviews identified that a range of

promising and innovative projects were being implemented under the Program but that a number of issues were affecting its overall performance and success. These issues included a lack of program logic and insufficient evaluation of health promotion interventions which could identify the impact of the projects on health gains, health outcomes and workforce capacity.

Operational Guidelines and Funding Guidelines were developed to support the implementation of the Program. These guidelines outlined specific program standards and funding requirements of the Program, and provided practical guidance on the application of these standards in the planning, design, delivery and evaluation of health promotion projects.

The Centre for Aboriginal Health conducted a series of Aboriginal health promotion capacity building workshops across NSW in 2010 which focused on program logic modelling, health promotion practice and building evidence through rigorous evaluation. The majority of those consulted during these workshops considered the current program's funding allocations were too small and often used to fund one-off, ad hoc programs which contributed little to substantial and sustainable health improvements.

Based on the reviews and implementation experience at a strategic and operational level, the following policy questions require careful consideration if the Program is to achieve a more sustainable contribution to improve Aboriginal health outcomes. Firstly, based on a modelled cost benefit analysis of the Program, what would provide best gains from the expenditure of the Aboriginal Health Promotion Program fund? Secondly, what contribution would either targeted allocations or small and flexible funds to support local work make? Finally, should investment be targeted towards building the Aboriginal health

promotion workforce including the capacity to provide interventions at the local level?

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The Chronic Care Service Enhancement Program

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The disparity in life measured in health outcomes and life expectancy between Aboriginal and non-Aboriginal people has been well documented. Aboriginal people living in NSW have a significantly higher incidence of chronic disease than the non-Aboriginal population. Chronic conditions such as cardiovascular disease, diabetes, chronic respiratory disease, and cancer are responsible for 70% of the health gap (ill health and mortality) between Aboriginal and non-Aboriginal people in terms of disability adjusted life years.¹

In response to this, the NSW Ministry of Health is funding the Living Well: the NSW Aboriginal Health Chronic Care Initiative for the development, implementation and evaluation of a range of evidence-based and culturally responsive secondary prevention and chronic disease management initiatives for Aboriginal people in NSW. The target group for the Living Well Initiative is Aboriginal people aged 15 years and over diagnosed with, or at risk of developing, the chronic conditions of diabetes, cardiovascular disease, chronic respiratory disease, renal disease, musculoskeletal and connective tissue disorders and malignant cancer.

The Chronic Care Service Enhancement Program is the most significant investment of the projects funded under the Living Well Initiative. The Program aims to improve access to secondary prevention health services, as well as improving the coordination and management of care for Aboriginal people with, or at risk of, chronic diseases. The Program will enhance chronic care services being delivered under the Chronic Care for Aboriginal People Program by the Aboriginal Community Controlled Health Services (ACCHS) and Local Health Districts throughout NSW.

Nine ACCHS are receiving funding under the Program to implement strategies that will increase the accessibility of services, provide early intervention for clients at risk of

chronic disease, and improve the care coordination and management of Aboriginal people with chronic diseases. The Centre for Aboriginal Health has a close working partnership with each service and the Aboriginal Health and Medical Research Council of NSW to ensure the Program is responsive to the needs of each service and local communities.

The ACCHS are implementing a range of specific strategies to improve the reach, screening and management of chronic disease in Aboriginal communities. To increase the number of Aboriginal people accessing the service for the first time or re-engaging with the service, the health services are holding open days and information sessions for local communities, providing outreach services and transport, and improving referrals with other services providers. To increase the number of clients who are screened for chronic diseases in line with evidence-based guidelines, services are providing staff training, increasing opportunistic screening, and improving reminder and recall systems. To improve the management of chronic disease in accordance with best practice guidelines, services are undertaking strategies such as organising regular multidisciplinary team case management meetings, improved care planning and referrals, delivery of self-management strategies and brief interventions to support patients.

Using the program funding, the health services have recruited a range of health professionals to implement these strategies, including Nurse Practitioners, Enrolled Nurses and Aboriginal Health Workers. Services are also able to use funding to source additional services, such as allied health and specialist services, and transport.

The second component of the Program focuses on the Local Health Districts, enhancing funding to the Chronic Care for Aboriginal People Program. A dedicated chronic care clinical position is being established in each Local Health District to provide clinical follow-up to Aboriginal patients with chronic disease within 48 hours of being discharged from hospitals across NSW.

A comprehensive evaluation of both phases of the Program is being carried out by the University of

Newcastle to measure the effectiveness and acceptability of interventions being delivered in improving health systems as well as improving measurable health outcomes.

Responding to family violence in Aboriginal communities: *The NSW Aboriginal Family Health Strategy*

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Family violence has a devastating impact on the health and wellbeing of Aboriginal communities.¹ In 2008, there were six times more Aboriginal than non-Aboriginal women reported to be victims of domestic violence (NSW Health data request on number of Indigenous victims of domestic violence related assault recorded by the NSW Police, NSW Recorded Crime Statistics from July 2006 to June 2009, from NSW Bureau of Crime Statistics and Research). The number of child protection reports made to the NSW Department of Community Services for Aboriginal children and young people has increased by more than three fold in the past 8 years.²

The *Aboriginal Family Health Strategy*,³ first released in 1998 presented an innovative approach to working to address family violence within a cultural context. The Strategy was originally limited to the individual and family support activities of Aboriginal Family Health Workers, including initial crisis support, advocacy and referral. Reviews of the Strategy identified a number of challenges including: the complexity of family violence; workforce shortages; community expectations; lack of consistent and coordinated service delivery; and the risk of duplicated effort due to the numerous interagency and whole of Government strategies targeting some locations.

A revised *Aboriginal Family Health Strategy*, released on National Sorry Day 2011, is being integrated into the NSW Health system as a model of care (Figure 1).⁴ The focus is family and culture with four elements: effective service delivery, strong community capacity, culturally competent work force and strategic leadership. It is built on a healing approach and is informed by research and evidence. The application of this model into mainstream services provides practical ways to enhance efforts within a culturally competent framework.

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Progress

Effective service delivery: Currently 25 Aboriginal Family Health Workers are employed in prioritised areas of need, predominantly in Aboriginal Community Controlled Health Services (ACCCHS) in regional NSW, and one position in the Justice Health system.

Strong community capacity: Locating Aboriginal Family Health Workers in ACCCHS is in keeping with the philosophy of the strategy that ‘solutions to family violence in Aboriginal communities will be community devised, managed and implemented’. These workers are now focusing more on early intervention and education which, when combined with a healing process, aims to build strong and resilient communities.

Culturally competent workforce: The Education Centre Against Violence supports the work of the Strategy to enhance the capacity of the Aboriginal workforce, and

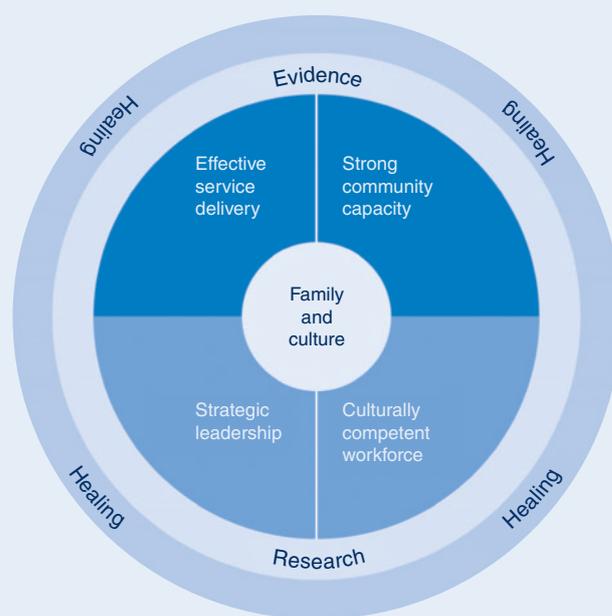


Figure 1. Aboriginal Family Health model of care
Source: Aboriginal Family Health Strategy

addresses recruitment and retention issues. The Certificate IV in Aboriginal Family Health and the NSW Advanced Diploma of Aboriginal Specialist Trauma Counselling ensure Aboriginal workers are equipped to address the complex needs of Aboriginal families. The Centre also provides training to develop the cultural competency of the non-Aboriginal workforce.

Strategic leadership: A trial of Aboriginal Family Health Coordinators, located in four Local Health Districts, is being undertaken. These coordinators will undertake a strategic role to facilitate better access for Aboriginal families to services responding to issues of family violence, including child protection.

Monitoring and evaluation: Information from the Aboriginal Family Health Worker Data Collection and preliminary evaluation of the Aboriginal Family Health Coordinator trial highlight the diverse needs of communities and the difficulty of evaluating a program based on a holistic approach that emphasises healing. Formal evaluation of the Aboriginal Family Health Strategy is planned to commence in 2012. In the long term, the success of this Strategy will be assessed from a family and

community-based perspective, in accordance with the principles of Aboriginal health.

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Healthy Ears, Happy Kids: a new approach to Aboriginal child ear health in NSW

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Otitis media is one of the most prevalent childhood conditions in developing countries and contributes to excess childhood mortality.¹ For children in developed countries, otitis media usually resolves spontaneously and without antibiotic treatment. In developing countries or in communities subject to socio-economic disadvantage, including many Australian Aboriginal communities, acute instances of the condition often do not resolve and may recur repeatedly.² Children with conductive hearing loss associated with otitis media may experience serious interruption to speech and language development and disrupted learning in school. For other children this can further exacerbate other educational and social disadvantages.¹

To address ear health issues for Aboriginal children in NSW under the *National Partnership Agreement for Closing the Gap in Indigenous Health Outcomes* initiative, NSW Health has developed and released the *NSW Aboriginal Ear Health Program Guidelines 2011–2015*.

The NSW Otitis Media Screening Program for 0–6 year old Aboriginal children was the NSW Health approach to ear health in Aboriginal children from 2004 to 2008. This program was a population-based (near universal) screening initiative to identify and treat young Aboriginal children with otitis media. The Centre for Aboriginal Health commissioned an evaluation of the effectiveness and appropriateness of this program in 2008. The evaluation involved extensive consultation across the sector through case studies and interviews with frontline health workers and policy makers from Aboriginal Community Controlled Health Services, the Department of Education and Training, the former Department of Health, the Office for Aboriginal and Torres Strait Islander Health, and the former Area Health Services.

The evaluation found that the program did not address the underlying social and environmental factors contributing to ear disease, was unsupported by evidence, was cost prohibitive and did not reduce prevalence.³ It recommended discontinuing the existing approach and adopting a broad public health approach that integrated the ear health program with existing child health surveillance and health-care programs, such as Child Health Checks, the Personal Health Record (Blue Book), the Aboriginal



Figure 1 The Healthy Ears Happy Kids logo

and Maternal Infant Health Strategy, the Aboriginal Oral Health Program, Statewide Eyesight Pre-schooler Screening, Statewide Infant Screening Hearing (SWISH) and Building Stronger Foundations for Aboriginal Children. The findings and recommendations of the evaluation are in keeping with a recent evidence review which stated that ... *the treatment of children detected through repeated screening has been shown to provide no long-term developmental or academic benefit.*⁴

To implement the recommendations of the evaluation, NSW Health established the NSW Otitis Media Expert Advisory Committee, comprised of a multidisciplinary team of health and education professionals with relevant ear health expertise. In 2011 the Advisory Committee and the Centre for Aboriginal Health released the *NSW Aboriginal Ear Health Program Guidelines 2011–2015*.⁵ The aim of these guidelines is to reduce the number of young Aboriginal children aged under 5 years being affected by otitis media, by delivering a strong preventive

approach through better education for parents, carers, extended families, health and education professionals.

The key actions of the program aim to reduce prevalence of otitis media by:

- addressing environmental health risk factors
- reducing maternal ante-natal smoking
- increasing maternal post-natal breastfeeding;
- improving safe and healthy housing conditions
- linking with existing child health surveillance programs;
- improving awareness and education among the Aboriginal community and human services professionals.

Ear health promotion resources have also been developed to support the new approach using the campaign branding Healthy Ears Happy Kids (Figure 1). With its new broad public health approach and strong emphasis on prevention, the program is committed to improving the ear health of young Aboriginal children across the state.

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Reporting of Aboriginal people in health data collections in NSW

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The accurate reporting of Aboriginal people in administrative data sets is essential to effectively monitor progress

towards closing the gap in Aboriginal health outcomes. Improving the reporting of Aboriginal people in NSW Health's data collection systems is a key priority under the *National Partnership Agreement on Closing the Gap in Indigenous Health Outcomes*.¹

The *National best practice guidelines for collecting Indigenous status in health data sets* documents the

recommended national approach for collecting and recording accurate information on the Aboriginal status of clients.² Self-report in response to a standard question is described as the most accurate means of ascertaining whether a person is Aboriginal or not. The question is: Are you (is the person) of Aboriginal or Torres Strait Islander origin?

In NSW, there is under-reporting of Aboriginal people across a range of health data collections and systems. In the NSW Admitted Patient Data Collection it is estimated that the level of correct reporting is 90.7%.³ The under-reporting of Aboriginal people in NSW Health's data collection systems may be attributed to a range of factors, including a lack of staff awareness and training, staff reluctance to ask the question, client reluctance to answer the question, staff perceptions about whether people want to identify as Aboriginal, lack of privacy when answering the question, limited data validation and follow-up of missing information, and inadequate data management systems.⁴ Aboriginal people's willingness to disclose their Aboriginal status and administrative staff preparedness to ask the question also depends on the existence of a culturally safe environment.

The Australian Council on Healthcare Standard Evaluation and Quality Improvement Program (EQuIP 5) requires all hospitals to demonstrate action on standards aimed at improving Aboriginal identification. This requirement provides an opportunity to support system-wide improvement in Aboriginal health and hospital data. A national pilot project in five hospitals has demonstrated that using a continuous quality improvement framework to improve the culture of hospitals for Aboriginal people can result in improving identification of Aboriginal people in health data sets.⁵

NSW Health currently has a number of activities underway to improve the accuracy of reporting of Aboriginal people in administrative datasets:

- The Centre for Aboriginal Health is reviewing the policy on identification of Aboriginal people to ensure it is consistent with the National Best Practice Guidelines and supports the EQuIP5 accreditation framework, and will support Local Health Districts in the implementation and monitoring of the revised policy.⁶ NSW Health is also working collaboratively with the Australian Institute of Health and Welfare to conduct the 2011 Admitted Patient Indigenous Status Survey in NSW.
- The Centre for Epidemiology and Evidence is investigating the feasibility of using record linkage to estimate

the under-reporting of Aboriginal people on routinely collected NSW Health datasets. The project uses linked records from a number of data collections, and has developed algorithms to enhance Aboriginal identification within each data collection.

- The NSW Hospital Identification Project, currently being developed by the Centre for Aboriginal Health, aims to demonstrate the effectiveness of a continuous quality improvement framework in improving the cultural competency of eight hospitals. The project aims to address the under-reporting of Aboriginal people by adopting a system-wide approach that goes beyond staff training and improvements in administrative systems to include initiatives that promote the cultural competency of each hospital.

Improved identification will lead to more accurate reporting of disease and risk factors among Aboriginal people and stronger evaluation on health system performance in closing the gap, which in turn will support the delivery of more effective, sustainable and culturally appropriate health services for Aboriginal people in NSW.

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Closing the gap in a regional health service in NSW: a multistrategic approach to addressing individual and institutional racism

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Abstract: Building a culturally safe and respectful organisation that genuinely addresses individual and institutional racism is a substantial and complex undertaking. Achieving this outcome requires sustained commitment and a comprehensive strategy, including the active involvement of Aboriginal stakeholders. This paper describes the journey of a large regional health organisation in NSW. A multistrategic approach is broadly described, with three strategies explored in depth. These are: staff education and training; leadership; and consultation, negotiation and partnerships. Challenges are discussed in the context of promising progress and an ongoing commitment to this important organisational goal.

Terminology

In accordance with NSW Health policy, the term 'Aboriginal' is used throughout this document to include Aboriginal and Torres Strait Islander peoples. No disrespect is intended towards our Torres Strait Islander staff, patients or communities, whose contribution to this important project is gratefully acknowledged.

The inequality between the health and wellbeing outcomes of Aboriginal and non-Aboriginal Australians is well documented, and closing this gap is the focus of many plans and strategies.¹⁻⁵ While the issues contributing to this health disparity are complex, there is no doubt that inequitable access to health services is a concern.⁵⁻⁸ The racism that many Aboriginal people experience when they access

the health system contributes to the low levels of access to health services.⁶⁻¹¹ These issues also affect our capacity to recruit and retain Aboriginal staff, and to provide them with a safe and respectful working environment.¹²⁻¹⁴

Racism occurs at both the individual and institutional level (Box 1).¹⁵ Individually, the attitudes, words and practices of health services staff can have a profound effect on Aboriginal clients.^{10,11} This issue is often the focus of workforce strategies such as cultural awareness training.^{10,13,16} While such strategies are appropriate and important, a broader, critical issue is the degree to which racism becomes embedded and perpetuated at the organisational level.^{6,7,9} Institutional racism results in a systemic failure of the organisation to meet the needs of Aboriginal peoples. Discrimination and inequities in the structure of policies, services and funding are readily identifiable but it is often the more subtle manifestations of racism throughout an organisation that go unrecognised.^{6,7,9}

All mainstream health programs and services must be appropriate, acceptable and accessible to all Australians. To achieve effective and sustainable change, a systematic organisational approach is required to address racism at both the individual and institutional levels. This paper describes the response of a large regional health organisation in NSW to institutional racism.

Addressing individual and institutional racism

Hunter New England Health (HNE Health) has the largest Aboriginal population of any NSW Local Health District. The executive team is committed to closing the gap in health and wellbeing outcomes between Aboriginal and non-Aboriginal peoples as a key strategic objective.¹⁷ All parts of the service are responsible and accountable for achieving this goal.

Institutional racism, by its very nature, is entrenched throughout an organisation.⁷ To address it effectively requires a complex combination of strategies. Figure 1 presents an overview of the multistrategic approach that has been adopted by HNE Health, with examples of specific initiatives beside each strategy. It should be noted that there are many more initiatives than those shown in Figure 1, and that there is substantial interconnectivity between them. Collectively they contribute to the objectives of culturally competent staff, culturally safe workplaces and culturally respectful health services.

Box 1. A definition of individual and institutional racism

Racism in general terms consists of conduct or words or practices which advantage or disadvantage people because of their colour, culture or ethnic origin. In its more subtle form it is as damaging as in its overt form.

Institutional Racism consists of the collective failure of an organisation to provide an appropriate and professional service to people because of their colour, culture or ethnic origin. It can be seen or detected in processes, attitudes and behaviour which amount to discrimination through unwitting prejudice, ignorance, thoughtlessness, and racist stereotyping which disadvantage minority ethnic people.

Source: The McPherson Report: Home Department (UK). The Stephen Lawrence Inquiry: Report of an inquiry by Sir William Macpherson of Cluny. Cm 4262-1. London: The Stationery Office; 1999.¹⁵

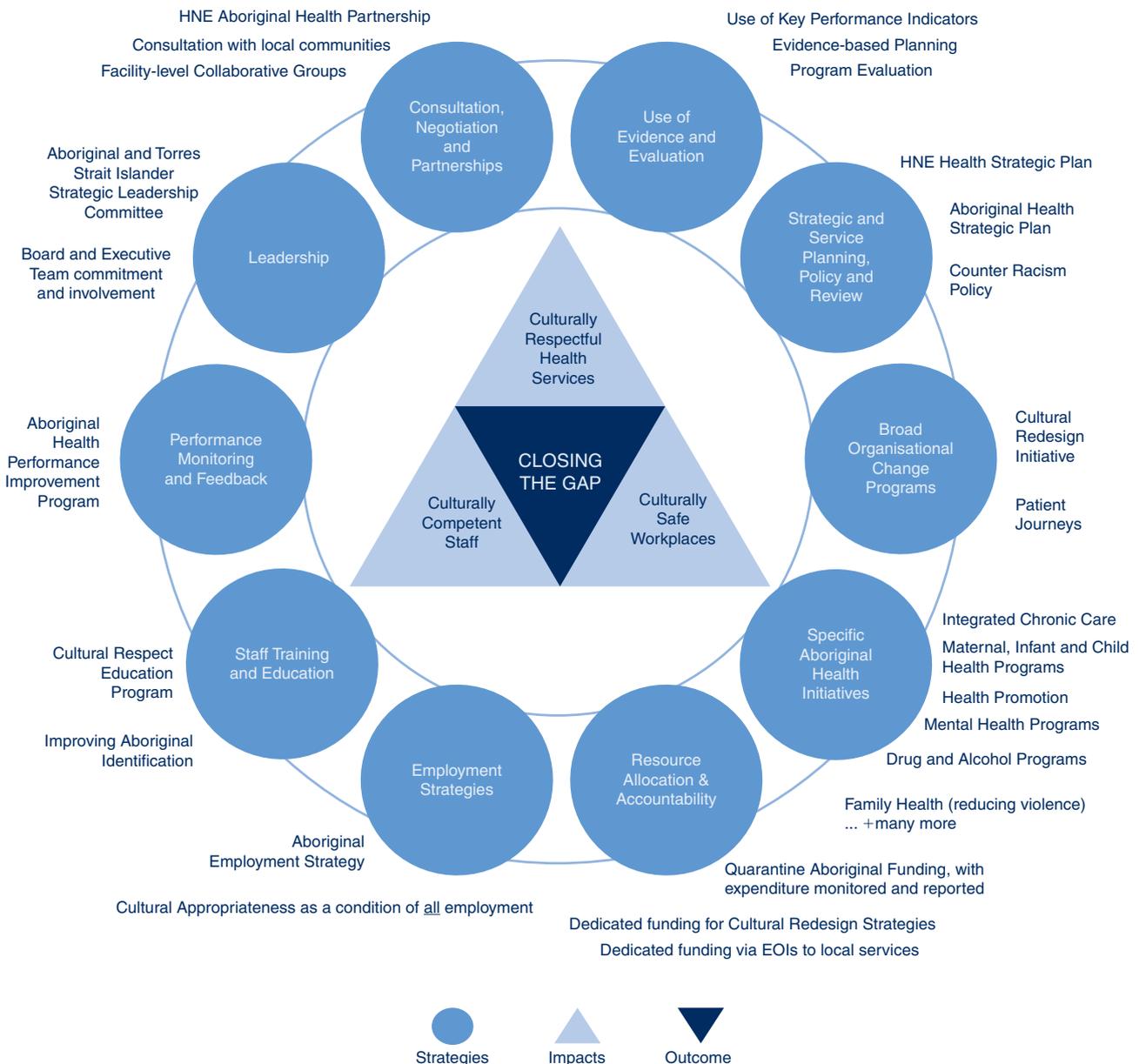


Figure 1. An overview of the multistrategic approach adopted by Hunter New England Health to address individual and institutional racism.

The strategies described in Figure 1 have evolved over a number of years, and will continue to evolve. In this paper, we focus on three specific strategies: staff education and training; leadership; and consultation, negotiation and partnerships. All three are vital to the overall approach, and were identified as among the earliest priorities for action, from which many of the other strategies would then flow.

Staff training and education: building culturally competent staff

Health is primarily a people business, and the cultural safety and appropriateness of our services are largely influenced by the cultural competency of our staff. Cultural competence begins with a strong appreciation of the need for cultural respect.^{18,19} To that end, delivery of a Cultural Respect Education Program commenced in 2007.

The approach taken in this Program differs from what is usually taken in cultural awareness training. The Program is deliberately challenging and confronting. Delivered over 2 days, the focus is understanding the meaning of being part of the dominant culture, discussion of white privilege and racism (both individual and institutional) and the impact of dominant culture on the lives of Aboriginal Australians. The Program encourages participants to question their own beliefs, assumptions, life experiences and attitudes.^{9,20,21}

The Program was developed and initially delivered by consultants from South Australia – an Aboriginal woman in partnership with a non-Aboriginal person. The consultants delivered the Program to more than 300 staff over 2 years. While this was a great achievement, it was important to develop a more cost-effective strategy to deliver the Program sustainably on a wider scale. Two Cultural Respect Co-facilitators were appointed, and with the support and mentoring of the original consultants, they developed a localised program to be offered within HNE Health. The co-facilitators work in partnership with HNE Health to develop, implement and evaluate the Cultural Respect Education Program, and provide strategic advice about implementing the Program.

Over 1350 HNE Health staff have now attended the workshops. The long-term goal is for all HNE Health staff to attend the training, but with a workforce of over 16000, the short-term priority is for staff in services with a high contact with Aboriginal people to be trained first.

The reaction from staff has generally been positive, with many describing a profound personal reaction to the difficult content (Box 2). However there have been other reactions; while service managers have reported that the majority of participants return to their workplace with a more culturally respectful approach, some workers have been angry that the organisation forced them to attend, and have struggled to accept or conform to the principles of the

Box 2. Reactions of Hunter New England Health staff to the Cultural Respect Education workshops

"... Eye-opening ..."

"This was most profoundly life changing. I have never experienced training which has made me consider my attitudes, beliefs and behaviours and the impact this has on others ..."

"... Uncomfortable ..."

"... New insight ..."

"I was humbled and felt overwhelmed as I reflected on my previous attitude and service delivery to Aboriginal communities ..."

training. This response has demonstrated the complexity and depth of the racial issues that must be addressed, and the importance of a multistrategic approach that extends beyond the training itself. Follow-up strategies have included individual counselling, performance improvement and monitoring and, where necessary, more stringent approaches including reference to the HNE Health Code of Conduct, Respectful Workplace Policy and disciplinary procedures. At times, this procedure has required intensive and challenging management processes.

An evaluation of the program commenced in early 2012. It will consider the strengths and gaps in program design and delivery, short and medium-term outcomes, and future directions.

Leadership

The active support of the highest levels of the organisation is essential.¹⁹ The Aboriginal and Torres Strait Islander Strategic Leadership Committee is co-chaired by the Director, Aboriginal Health and the Chief Executive of HNE Health. It includes several members of the executive team, HNE Health staff and representatives of partner organisations. Importantly, the Committee has equal numbers of Aboriginal and non-Aboriginal members.

The Aboriginal and Torres Strait Islander Strategic Leadership Committee has provided strong leadership in establishing many of the initiatives shown in Figure 1. For example, the Cultural Redesign Initiative is a service-wide, organisational change program that coordinates a wide range of strategies. The Initiative ensures that the learnings from the Cultural Respect Education Program are translated into meaningful change within the workplace. A range of tools, guidelines and resources are being developed to assist this process, and to build the capacity of the organisation to meet this goal. For example, the Counter Racism Policy Compliance Procedure will assist in the identification and reporting of racism in the workplace, with specific, executive-endorsed processes to investigate and address allegations of workplace racism when they arise.

Leading by example, the entire HNE Health executive team were among the first to complete the Cultural Respect Education Program. This top-down approach was useful not only to demonstrate commitment, but also to ensure leadership and reinforcement of learnings in the workplace. Managers cannot provide meaningful and informed follow-up, support and management of staff returning from the Program if they have not attended themselves. Therefore it was agreed that senior managers would be prioritised, and that no staff should attend until their immediate line manager had been trained. Over 90% of senior managers have now completed the training.

Leadership is also vital at the facility level. Facility-led Collaborative Groups involve health service management and Aboriginal and Torres Strait Islander staff to provide ongoing discussion and review of relevant policy, planning, service delivery and resource allocation.

Consultation, negotiation and partnerships

The concept of partnership is another vital aspect for ensuring mainstream services can meet the needs of Aboriginal and Torres Strait Islander peoples more effectively. Partnership implies genuine and meaningful input and influence at all levels of the organisation, and a shared approach to decision making that is respectful of and responsive to Aboriginal cultures.^{3,19,22} HNE Health has formal partnerships with Aboriginal stakeholders, including the HNE Aboriginal Health Partnership with Aboriginal Community Controlled Health Services. There are numerous other collaborative groups, including the Aboriginal and Torres Strait Islander Strategic Leadership Committee, and specific committees and working groups for many of the initiatives described in Figure 1. The aim of these groups is to provide effective leadership and ongoing advice on health policy, planning, service delivery and resource allocation.

Perhaps most importantly, partnerships rely on trust (Box 3).²² To build this trust, HNE Health is committed to improving consultation mechanisms, both internally

Box 3. Reflections on the importance of trust when working in partnership

Partnerships between organisations start from trust between individuals. It is important for organisations to have a clear agreement about their partnership, what they will put into it and what they will work towards together. Partnership agreements are important for continuity and for conflict resolution, but as one participant in this research said: 'It's what is in the guts of the relationship that will produce outcomes, not the agreement papers'.

Source: Davies J. Walking together, working together: Aboriginal research partnerships. Alice Springs: Desert Knowledge Cooperative Research Centre; 2007.²²

with Aboriginal staff, and externally with Aboriginal communities and organisations. Besides the Aboriginal Health Impact Statement, consultation guidelines are also being developed; they will engage Aboriginal staff and community representatives, including Elders and organisations, to ensure cultural appropriateness. Cultural appropriateness will not be limited to the planning stages of the initiatives, but will be continued on throughout all stages of development, with regular communication of progress and identification of concerns that can then be addressed together.

Learnings so far

While progress is difficult to measure in quantitative terms, there have been significant learning outcomes. As previously mentioned, some staff have reacted negatively to the challenging nature of the Cultural Respect Education Program. While the intensive ramifications of managing this response at the individual level have already been discussed, broader organisational consequences remain. The resulting conflict may inadvertently have a detrimental effect on the cultural safety of the workplace, both for Aboriginal colleagues and Aboriginal people accessing the health service. Careful and at times stringent management has been required to address this consequence of the Program.

The undertakings described within this paper all stem from the fundamental acknowledgment that individual and institutional racism do exist within our health service. Bringing this issue so openly to the forefront can and does result in a greater emphasis on these difficult issues, and a need for increased and improved response by management. The program has increased the expectations of Aboriginal staff members that all issues of racism will be dealt with appropriately. While this is the intention, the varying experience, understanding and conviction of individual managers in regard to racism result in inconsistent approaches to managing such issues. Many matters escalate rapidly for resolution by the executive team, involving substantial time commitment. It is important to equip managers to be able to effectively address all sensitive, complex and difficult to resolve issues and, above all, to acknowledge that long-term organisational change cannot be achieved without substantial and sustained effort by many people.

The executive team recognises these challenges and is determined to improve its management to give Aboriginal staff, patients and community members confidence that the health service has zero tolerance to racism. Investment in mediation and team building in some teams that have a significant percentage of Aboriginal staff has created greater understanding of what working in partnership involves, and how best to manage tensions safely when they arise.

Despite the challenges, feedback from managers throughout the service indicates a growing commitment to the principles of cultural redesign, and a sense of pride that the organisation has commenced this journey.

Conclusions

Building a culturally safe and respectful organisation that genuinely addresses racism and establishes effective partnerships with Aboriginal peoples is a long and complex undertaking. The many strategies and initiatives described here demonstrate the scope of work that is necessary to achieve sustainable organisational change. After several years of intensive and proactive work, the foundations have been laid by providing strong, consistent and visible leadership, building the cultural competency of staff, and committing to genuine shared decision making. The challenge is to maintain the focus and to build on the work that has started as we continue to redesign our health services to better meet the needs of Aboriginal peoples and truly close the gap in health outcomes between Aboriginal and non-Aboriginal Australians.

Acknowledgments

In respect to the wide range of individuals and communities who have had input into this important work, individual authors have not been listed. The working group for this paper wishes to acknowledge our local Aboriginal communities and staff, the consultants involved in the original Cultural Respect Education Program and the members of their local communities who contributed to it, and members of local leadership groups that have supported this undertaking, notably the Aboriginal and Torres Strait Islander Strategic Leadership Committee, Cultural Respect Education Steering Committee, Aboriginal Employment Strategy Steering Committee and the HNE Health Aboriginal Health Partnership Committee.

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The Aboriginal Maternal and Infant Health Service: a decade of achievement in the health of women and babies in NSW

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Abstract: The Aboriginal Maternal and Infant Health Service was established to improve the health of Aboriginal women during pregnancy and decrease perinatal morbidity and mortality for Aboriginal babies. The Service is delivered through a continuity-of-care model, where midwives and Aboriginal Health Workers collaborate to provide a high quality maternity service that is culturally sensitive, women centred, based on primary health-care principles and provided in partnership with Aboriginal people. An evaluation of the Service found that the program is achieving its goals in relation to the provision of antenatal and postnatal care and has demonstrated improvements in perinatal morbidity and mortality rates.

In 2009, 96 439 babies were born in New South Wales (NSW); of these, 2931 (3%) were born to mothers who identified as Aboriginal.¹ Higher rates of perinatal morbidity and mortality are found in Aboriginal women compared with non-Aboriginal women. These higher rates are associated with poor health status, underuse of antenatal and postnatal services, a high adolescent birth rate and the social, economic and political factors affecting many women in Aboriginal communities.^{2,3}

In 1998, the Aboriginal Perinatal Mortality Project was established to address the high rate of Aboriginal perinatal mortality in NSW. The Project was a response to the NSW Maternal and Perinatal Committee's review of Aboriginal perinatal deaths in 1998.² The review found that 59% of Aboriginal perinatal deaths were stillbirths and 41% were neonatal deaths (Table 1). In 2000, the NSW Aboriginal perinatal mortality rate was 17.9 per 1000 births compared

to the non-Aboriginal rate of 9.7 per 1000 births. The percentage of low birthweight Aboriginal babies (a risk factor for perinatal morbidity and mortality) in the same year was 11.9%, which was almost twice the non-Aboriginal rate of 6.4%.²

The review revealed that a large number of the neonatal deaths were related to extreme prematurity. The review found that, of the 32 perinatal deaths in Aboriginal babies in 1998, 34% (11 deaths) of the mothers had no, or two or fewer, antenatal care visits. As antenatal care was not recorded in an additional seven records, the true proportion of women who did not have antenatal care could have been as high as 56%.² The under-utilisation of antenatal and postnatal services by Aboriginal women results in inadequate management of complications during pregnancy and the perinatal period and leads to increased perinatal mortality and morbidity.² Figure 1 shows a reduction of perinatal deaths from 1990 to 2006 and increased access to antenatal care before 20 weeks from 1994 to 2006.

In 1998, the Aboriginal Perinatal Mortality Project found that, to improve the health of Aboriginal mothers and babies, creative public health strategies were required: to increase the self-esteem of Aboriginal women; to have strong and cohesive Aboriginal communities with raised standards of living; and to increase access by Aboriginal women to antenatal services by making maternity services more accessible and culturally appropriate.

As a result, a model based on the findings of the Aboriginal Perinatal Mortality Project was developed. This model was called the NSW Aboriginal Maternal and Infant Health

Table 1. Perinatal deaths among Aboriginal babies in NSW, 1998

Gestational age Weeks	Stillbirths n	Neonatal deaths n	Total N
20–27	6	8	14
28–31	3	1	4
32–36	5	1	6
37–41	5	3	8
Total	19	13	32

Source: The NSW Aboriginal perinatal health report. Sydney: NSW Department of Health; 2003.

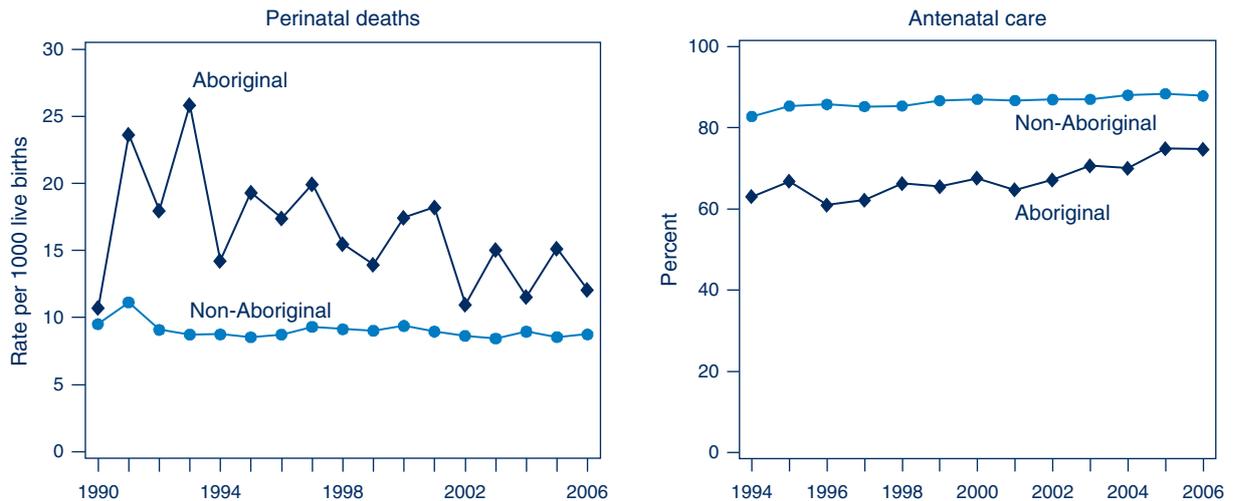


Figure 1. Comparison for Aboriginal and non-Aboriginal mothers in NSW of the rate of perinatal deaths of babies for the period 1990 to 2006 and of the timing of the first antenatal visit before 20 weeks gestation for the period 1994 to 2006.

Source: NSW Midwives Data Collection (HOIST). Centre for Epidemiology and Research, NSW Ministry of Health.

Strategy (now known as the Aboriginal Maternal and Infant Health Service [AMIHS]).⁴ This paper describes a decade of the development, evaluation and expansion of a service designed to improve maternity and infant health outcomes for Aboriginal women and babies. This service is the first of its kind in NSW.

Model of care

AMIHS was funded by NSW Health in December 2000 and implemented in 2001. The goal was to improve the health of Aboriginal women during pregnancy and decrease perinatal morbidity and mortality for Aboriginal babies and their mothers in NSW. A continuity-of-care model was developed in which midwives and Aboriginal Health Workers work together to provide a high-quality maternity service. AMIHS is a culturally appropriate maternity service; its philosophy is based on cultural respect, social justice, participation, equality, access, learning and collaboration. The guiding principles that make the Service unique include taking a broad social view of health, forming effective partnerships with Aboriginal communities, working within a primary health-care framework and providing women-centred care.

AMIHS midwives and Aboriginal Health Workers provide antenatal and postnatal care, from as early as possible after conception up to 8 weeks postpartum. The care is provided in the community but is linked into mainstream maternity services to ensure that risk management and education are available to AMIHS teams.

Community consultation

Community consultation is critical in AMIHS. All associated programs are designed in consultation and in line with the local context and needs, community relationships and community and health sector expectations. This ensures that the service is located in an appropriate setting and is

accessible to the Aboriginal community. Flexible service delivery and the provision of transport are essential for access to the AMIHS and to the services to which patients are referred. AMIHS services can vary depending on the needs of the local community and the skills and expertise of the staff.

AMIHS takes a holistic approach to Aboriginal women's health. Local programs encourage innovative community development projects to engage and empower Aboriginal women and their communities. Health promotion is achieved through Aboriginal Health Workers using community development strategies in partnership with other agencies.

Partnering with other services

Effective local Aboriginal health partnerships and collaboration with other services are important to ensure the best outcomes for families. It is particularly important for AMIHS to have strong links with the local Aboriginal Community Controlled Health Service and other non-government and government agencies. This collaborative approach aims to ensure the sustainability of the program. Effective collaboration also includes consultation and referral with health and other services, such as general practice, to assure high-quality, integrated pregnancy care.

An example of effective collaboration is the link established between AMIHS and the Brighter Futures program. The Brighter Futures program is an early intervention program of the NSW Department of Family and Community Services, Community Services Division, that provides support early in a child's life that is tailored to meet the needs of each family. Its aim is to keep children out of the child protection system and to improve child wellbeing by supporting families. This link means that eligible AMIHS

families can more easily access services such as child care, parenting programs and home visiting.

Transition of care

The smooth transition of care to child and family health nursing services ensures continuity of care for the child up until school age. Child health and developmental checks at specific milestones in early life aim to ensure that the child reaches school age ready to learn. NSW Health is implementing the Building Strong Foundations for Aboriginal Children, Families and Communities program in a number of areas. This program is based on the AMIHS model with a child and family health nurse and an Aboriginal health education officer providing primary early childhood health care to families up until the child goes to school. Where Building Strong Foundations programs are located near an AMIHS, the transition of care for a family is seamless from the maternity service to the child and family health service.

Training and Support Unit

A statewide Training and Support Unit is another element of the AMIHS model. Its aim is to provide professional development and support, reduce the isolation of AMIHS staff and develop networks. It successfully promotes collaboration and partnerships between AMIHS programs, including providing locally based training for staff in each AMIHS network. The unit also organises statewide conferences in order to share knowledge, resources and to provide networking opportunities among health workers in AMIHS across the state who can often be professionally and geographically isolated.

AMIHS adheres to NSW Health policies and procedures and legislation, including those that protect and promote the safety, welfare and wellbeing of children. Programs provide data for statewide Key Performance Indicators and submit quarterly and annual reports at the end of each financial year.

Evaluation of the Aboriginal Maternal and Infant Health Service

As part of the implementation of AMIHS in 2000, external consultants were engaged to plan the evaluation of the Service. The evaluation was longitudinal and data were collected at four time periods over 3 years. The aim was to measure the extent to which AMIHS was achieving its goals and to identify its strengths. Based on these findings, the evaluation report then made recommendations for future improvements.⁴

Results of the evaluation

The evaluation showed that AMIHS was improving maternity services and outcomes for Aboriginal women

and that Aboriginal women trusted and supported the service provided.⁴

The evaluation showed that AMIHS had achieved the following outcomes for Aboriginal mothers and babies:

- increased proportion of women who attended their first antenatal visit before 20 weeks gestation (65% before the Service began versus 78% in 2004)(OR 1.2; 95% CI 1.01–1.4; $p = 0.03$).
- decreased rate of low birthweight babies (13% versus 12% after the Service). The difference is not statistically significant.
- decreased proportion of preterm births (20% versus 11%; OR 0.5; 95% CI 0.4–0.8–1.4; $p < 0.001$).
- decrease in perinatal mortality from 1996–2000 (20.4 per 1000 births) compared to 2001–2003 (14.4 per 1000 births) in Local Government Areas where AMIHS was located. The difference is not statistically significant owing to small numbers.
- improved breastfeeding rates from 67% initiating breastfeeding and 59% still breastfeeding at 6 weeks in 2003, to 70% initiating breastfeeding and 62% still breastfeeding at 6 weeks in 2004.

The evaluation also showed that Aboriginal women were very satisfied with AMIHS programs. Home visiting, inclusion of an Aboriginal worker on the team and reminders about and transport to antenatal appointments were the most important aspects cited.

The evaluation highlighted the importance of the Training and Support Unit in providing support and development opportunities for Service staff. The Unit linked Aboriginal Health Workers to a maternity and infant health training course and a number of graduates enrolled in a Bachelor of Midwifery program to become qualified midwives.

The evaluation made recommendations for improvement, including:

- that access to child and family health services targeting Aboriginal families be improved.
- that smoking cessation programs be a priority.
- that the inclusion of an Aboriginal worker in the Training and Support Unit be considered.

AMIHS continues to make an impact on Aboriginal women accessing antenatal care (Figure 2).

Expansion of the Aboriginal Maternal and Infant Health Service

In 2007, additional funding was provided to expand AMIHS from 7 programs in 6 former NSW Area Health Services to over 30 programs with many more sites across NSW (Figure 3). The former Department of Community Services (now Department of Family and Community Services) contributed joint funding with NSW Health for 2 years to support the statewide expansion and to establish a priority referral pathway between the AMIHS and the

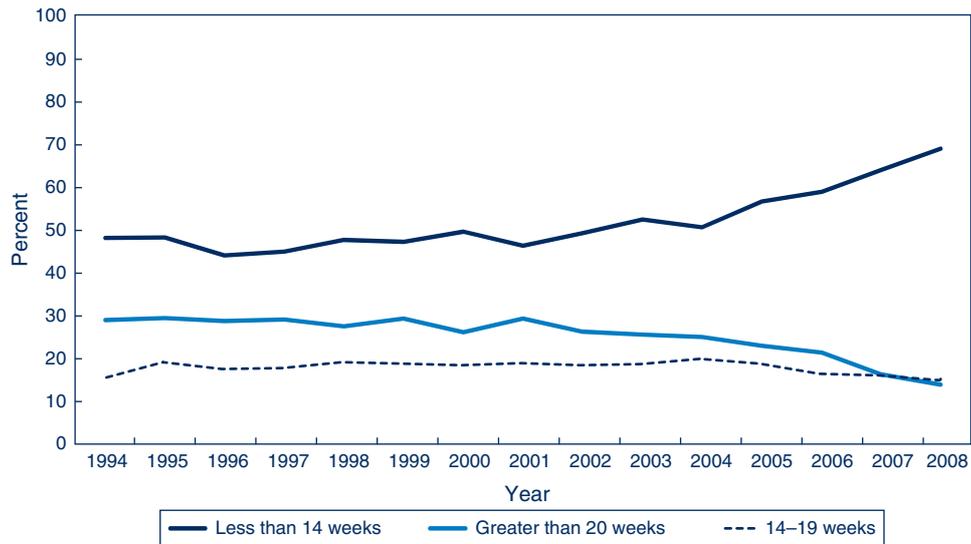


Figure 2. Trends in gestational age of Aboriginal babies in NSW at the start of antenatal care for the period 1994–2008.

Source: NSW Midwives Data Collection (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

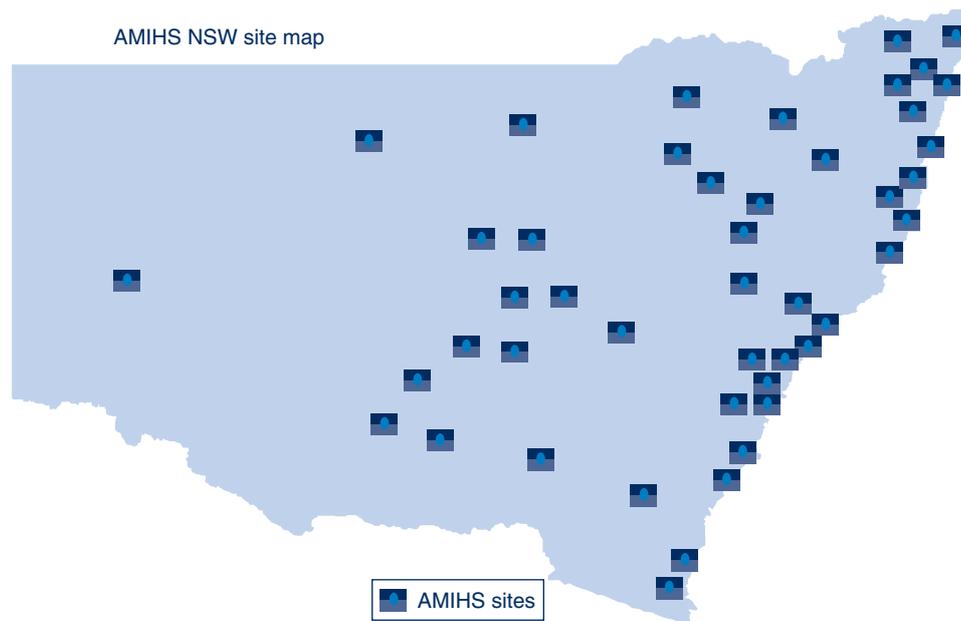


Figure 3. Locations of Aboriginal Maternal and Infant Health Service (AMIHS) programs in NSW, 2012.

Brighter Futures early intervention program. AMIHS now covers approximately 75% of Aboriginal births.

With the expansion of AMIHS and the implementation of Building Strong Foundations, the Training and Support Unit has been restructured into the Training and Support Unit for Aboriginal Mothers, Babies and Children. This Unit consists of a number of educators and other staff, including Aboriginal health educators. The Training and Support Unit is situated in the Rural Directorate of the Health Education and Training Institute.

As part of the expansion of services, funding was also provided for AMIHS resources. These included a service delivery model and workforce and recruitment strategy, the Strong Women Strong Babies Pregnancy Diary and safe sleeping brochures for consumers. Within the Closing the Gap initiatives, a number of new programs are being implemented to support AMIHS programs. These programs include secondary mental health, and drug and alcohol services in selected AMIHS programs and the *Quit for new life* smoking cessation in pregnancy program in all AMIHS sites.

The Aboriginal Maternity Data Collection, a de-identified database from the Perinatal Data Collection, was set up to support the data management and evaluation of AMIHS. Work is continuing on the collection to ensure that the data systems for AMIHS are robust to assist in the current evaluation of AMIHS.

Conclusions

The evaluation of AMIHS demonstrated that the program is successfully meeting its goal to improve the health outcomes of Aboriginal mothers and babies by providing culturally appropriate maternity care.

The evaluation highlighted the strengths in the program, including the partnerships between the Aboriginal Health Workers and midwives working together in a primary health-care model to provide continuity of care. It is delivered in the community by a highly committed skilled team who have strong relationships with both the community and the health services. The retention of staff and the trust between the AMIHS team and the women in their care are impressive.

Recommendations to strengthen the current model have subsequently been addressed through the implementation

of a culturally appropriate child health program (Building Strong Foundations), the implementation of the Aboriginal specific *Quit for new life* smoking cessation program and the restructuring of the Training and Support Unit to include Aboriginal health educators.

The next evaluation of AMIHS will again determine whether the program is achieving its goals and identify its strengths 10 years after its commencement.

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The development and implementation of a strategic framework to improve Aboriginal child development and wellbeing in far west NSW: a collaborative approach

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Abstract: In 2005, the *Maari Ma Chronic Disease Strategy* of the Maari Ma Health Aboriginal Corporation in far west NSW identified the importance of addressing the fetal, infant and child origins of chronic disease in adults. In 2008 a process for developing a strategic framework to improve the development and wellbeing of children was initiated. The process incorporated all organisations involved with children. A multisectoral working group was established to facilitate the development of the strategic framework which was published in 2009 and a Project Officer was employed by Maari Ma to implement it. This included working with agencies that have the potential to affect the social determinants of health. It is anticipated that, in the medium to long term, this approach will contribute to reducing the rate of chronic disease in adulthood, and reduce the gap between Aboriginal and non-Aboriginal health outcomes.

Over the past decade Maari Ma Health Aboriginal Corporation, Broken Hill in the far west of New South Wales (NSW) has adopted a whole-of-life course, population-based and preventive approach to improving health outcomes for the Aboriginal population it serves. In an effort to improve health outcomes and close the gap between Aboriginal and non-Aboriginal people, Maari Ma published and began implementing *The Chronic Disease Strategy*

in 2005. Part of the Strategy recognised the fetal and childhood origins of chronic disease in adults. At that time, the service did not have a similar comprehensive framework for child health. As a result, Maari Ma supported and facilitated the development of the *Strategic framework to improve child development and wellbeing for Aboriginal children in the far west*, which was published in March 2009.

This paper describes both the *Maari Ma Chronic Disease Strategy* and the development and implementation to date of the strategic Framework for children.

The Maari Ma Chronic Disease Strategy

The Strategy was based on a number of existing documents including *Preventable Chronic Diseases Strategy (1999)* from the Northern Territory Department of Health and Community Services, *Chronic Disease Strategy, Enhanced Model of Primary Health Care (Queensland Health)*, *National Chronic Disease Prevention Framework (2001)* (National Public Health Partnership) and NSW Health's then draft *NSW Aboriginal Chronic Disease Service Framework (2003)*.

The *Maari Ma Chronic Disease Strategy* was comprehensive and included evidence-based, best-practice early detection, prevention and management of chronic disease. The Strategy drew on current best practice in Australia and specifically noted that 'the origins of many chronic diseases are set *in utero and early childhood* (most notably through low birthweight, growth retardation and repeated childhood infections) and are worsened by lifestyle changes (weight gain, lack of physical activity and substance abuse).' It noted that 'the diseases and their risk factors are also inextricably linked with the broader *socio-economic determinants* of health and quality of life, particularly education and employment. Lifestyle choices are often more reflective of unrelenting socio-environmental constraints rather than personal preferences. Therefore an *integrated, intersectoral and whole-of-life* approach is needed.'

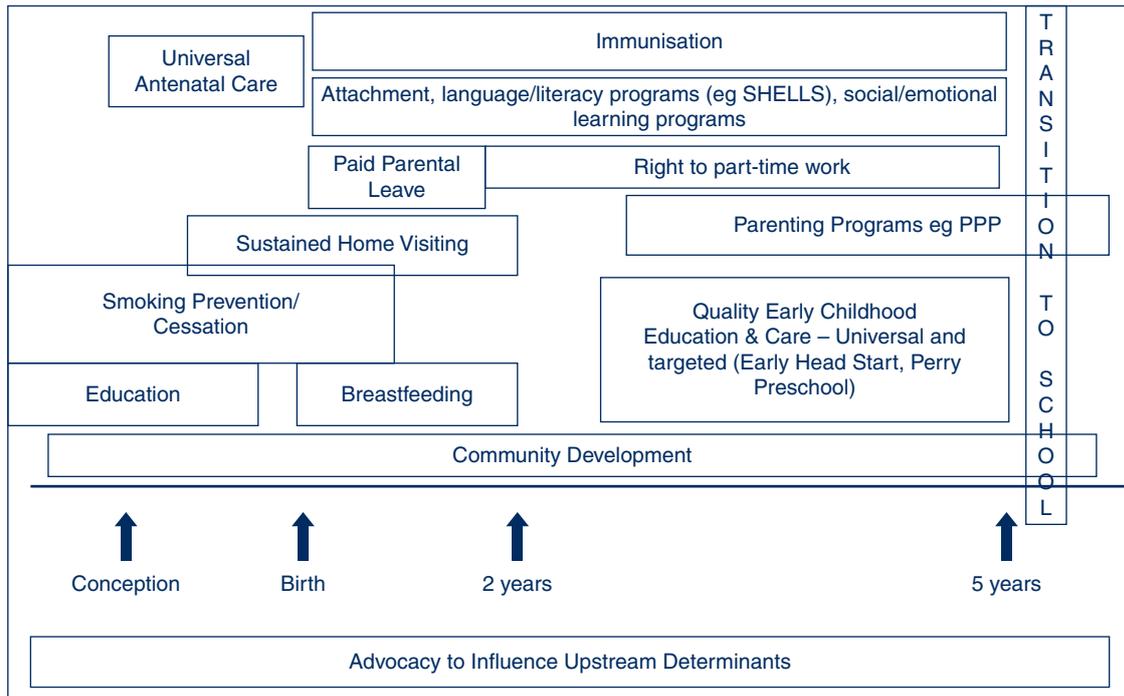


Figure 1. Key components of the strategic framework to improve child development and wellbeing for Aboriginal children in the far west of NSW, 2009.
Adapted from: Nossar V, Alperstein G. Key Initiatives to achieve health gain for children. *NSW Public Health Bull* 1998; 9(11): 126–7.

Finally, the document recognised that while some improved outcomes would be seen in the short to medium term, as well as a reduction in long-term financial costs, the full impact of all the interventions would not be felt for some years. This was therefore a staged long-term strategy to overcome problems that have arisen over many decades.

Strategic framework document

With the recognition of the fetal, infant and early childhood determinants of chronic disease, Maari Ma undertook to develop a preventive and population-based approach to improving fetal, infant and early childhood development and wellbeing. Child development and wellbeing refer to physical, emotional, social and cognitive wellbeing. This concept is similar to the Aboriginal definition of health¹:

Health does not just mean the physical wellbeing of the individual but refers to the social, emotional, spiritual and cultural wellbeing of the whole community. This is a whole-of-life view and includes the cyclical concept of life-death-life.

There is well documented evidence that investment in promoting child development and wellbeing in the early years is more cost effective than addressing ill-health, poor social outcomes and educational deficits later in life. For example, for every \$1 spent per child on the Perry Preschool program, at 40-year follow-up, \$17 is returned to

society²; for every \$1 spent on the nurse home visiting program, at 15-year follow-up, \$5 is returned to society.³

Using the same principles that informed the Families NSW strategy of multisectoral participation, a preventive, early intervention and outcomes focus, a population approach and evidence-based strategies, the process was initiated by organising a forum in Broken Hill in May 2008 which was attended by all organisations and agencies involved with children. Presentations of the Framework strategy, including the principles, rationale and supporting evidence, were given separately to all involved communities in the region. A multisectoral working group comprising health (Aboriginal community controlled and mainstream), education, preschool, community services, police and Non Government Organisations (NGOs) has been meeting regularly to progress implementation of priority strategies.

From previously published research, the key strategies to improve child development and wellbeing from a prevention, early intervention and promotion of health perspective are summarised in Figure 1.

Using those strategies as a guide, a framework was developed for the local Aboriginal population and the services engaging with them. Based on the research, the strategies in the Framework have the potential to lead to improved child development and wellbeing outcomes in the short to medium term, a reduction in some chronic disease

Box 1. Maari Ma documents supporting the strategic framework to improve Aboriginal child development and wellbeing

- *Maari Ma Chronic Disease Strategy* (2005)
 - *Strategic framework to improve child development and wellbeing for Aboriginal children in the far west* (2009)
 - *Health, development and wellbeing in far western NSW. A picture of our children* (2009)
- These documents are available at: <http://maarima.com.au> under Publications.

in adulthood, as well as a reduction in long-term financial costs. However, like the chronic disease strategy, the full impact of all the interventions will not be felt for some years.

Monitoring outcomes

In order to monitor the impact of the strategies, a baseline set of data was developed and *Health, development and wellbeing in far western NSW. A picture of our children* was published in September 2009 (Box 1). This report was modelled on the Australian Institute of Health and Welfare's national indicators of children's health and wellbeing⁴ and included health, educational and social indicators to reflect the broad approach being taken to child development and wellbeing. Where possible, data from far western NSW were used to compare outcomes for local Aboriginal children and their families with Aboriginal populations elsewhere in NSW, and NSW populations in general. In cases where local data could not be obtained, in regional (the former Greater Western Area Health Service) data were used. These key indicators will be collected every 5 years to monitor progress and the impact of strategies that are implemented.

A smaller subset of 14 key indicators was chosen to monitor the gap in outcomes. The desired outcome is for the gap to be equal to or less than 1, indicating that the result for the Aboriginal population in far western NSW is the same as, or better than, the whole NSW population.

Implementation of the Framework

The implementation of the strategies in the Framework is a long-term initiative. The same multisectoral working group has been reconvened to facilitate and drive the implementation. Since the completion of the Framework, the following changes and new initiatives have occurred:

- The Maari Ma 'Healthy Start' program, a preventive schedule of clinic-based and home visits by midwives, child and family nurses and primary health care and Aboriginal health workers from the antenatal period to school entry, was revised to reflect the most up-to-date research evidence related to prevention, early

intervention, and screening and surveillance. Most recently, general practitioners employed by Maari Ma have been incorporated into the schedule.

- A perinatal, infant, child and adolescent psychiatrist was engaged to build the capacity of antenatal and child and family staff in mental health in pregnancy, bonding and attachment between mothers and babies, promotion of resilience, and management of common childhood behavioural problems. This capacity building has entailed quarterly training sessions and clinical supervision of staff.
- In order to promote a collaborative approach and work with agencies and organisations influencing the social determinants of health of families and young children, a full time Early Years Project Leader was employed in February 2010. The Project Leader has focused on three key areas:
 - a. *Establishing networks*: Local Child and Family networks have been established in Broken Hill, Menindee and Wilcannia to foster collaborative working relations between all agencies working with families with young children.
 - b. *Early childhood education and care*: Training in literacy, infant mental health, science and maths has been coordinated for health staff, NGOs and early childhood educators; an introduction to children's services training for the Wilcannia Intensive Supported Playgroup staff has been delivered; an ongoing Early Years Discussion Group comprising early childhood educators working in child care and preschools to share knowledge and ideas around the National Quality Framework for Early Childhood Education and Care has been facilitated; early literacy through community events has been promoted; a 'Book-in-Homes' program has distributed books in Wilcannia and Menindee to families with infants and young children 0–3 years of age.
 - c. *Parenting*: The development of Kiilalaana marta-marri (Growing up really big Barkindjii) in conjunction with NSW Family and Community Services (Aboriginal Child, Youth and Family Strategy), a resource on child development for parents is being facilitated; the Broken Hill Healthy Start playgroup for Aboriginal families with young preschool-aged children which operates on a weekly basis is being initiated and led.

After 3 years of implementation, a formal evaluation of the implementation process will be undertaken to identify achievements and gaps.

Discussion

Health services alone cannot optimise the health, development and wellbeing of Aboriginal children; it is also necessary to influence the socio-economic determinants. In addition to taking a population approach, the strategic framework is an attempt to influence the socio-economic

determinants by working collaboratively with other government and non-government agencies that have the potential to affect some of the socio-economic determinants of health, child development and wellbeing.

Many of the strategies in Figure 1 are currently being implemented, fully or partially, such as immunisation, home visiting programs, community development and early literacy. Others require further funding, planning and implementation. Advocacy to influence the socio-economic determinants and higher level policies such as paid parental leave is an ongoing process and the responsibility of all those attempting to improve the health and wellbeing of populations, particularly the most disadvantaged.

The implementation of the Framework is a long-term process and dependant on many factors including available funding, staffing levels and commitment by those involved.

Conclusion

It is anticipated that progressive improvements in health, educational and social outcomes will be achieved, and will eventually result in bridging the health gap between

Aboriginal and non-Aboriginal outcomes in the far west of NSW by:

- taking a collaborative approach
- involving all organisations that engage with Aboriginal families and potentially have an effect on child health and wellbeing
- focusing on prevention and early intervention.

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The Chronic Care for Aboriginal People program in NSW

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Abstract: Aboriginal people living in NSW continue to experience greater health risks, poorer health and shorter life expectancies than non-Aboriginal Australians. The NSW Health-funded program, Chronic Care for Aboriginal People, was established from existing initiatives to rethink the way chronic care services were delivered to Aboriginal people in NSW. Refocusing and building on existing projects led to NSW Health providing an evidence base of what was working in Aboriginal communities. A model of care for Aboriginal people with chronic disease has been developed. Recommendations from two evaluations have allowed further improvement for the delivery of chronic care services for Aboriginal people. The Local Health District Service Agreements include relevant indicators and strategic priorities relating to the chronic care program.

Aboriginal people are generally less healthy than other Australians, die at much younger ages and suffer more chronic conditions and a lower quality of life.¹ In New South Wales (NSW), Aboriginal people experience a disproportionately high burden of chronic conditions, including cardiovascular disease, kidney disease, chronic respiratory disease and diabetes, which significantly contributes to their greater morbidity and premature mortality compared to non-Aboriginal Australians.^{2,3} For example, hospitalisation rates for Aboriginal people compared to non-Aboriginal people in NSW are 70% higher for cardiovascular diseases, 200% higher for diabetes and 100% higher for chronic respiratory disease.²

The challenges of managing chronic disease are compounded by the complexity of the conditions and the need of patients to access multiple service providers in different sectors over an extended period.² For Aboriginal people, chronic disease is associated with cultural, economic,

social and historical issues which impact on service access and uptake. Because the current health-care system often does not adequately meet the needs of Aboriginal people in culturally appropriate ways, NSW Health set out to develop a model of care for addressing chronic diseases in Aboriginal communities. This initiative would then provide an evidence base for the effective management and treatment of chronic diseases in Aboriginal people. This article provides an overview of the program of Chronic Care for Aboriginal People and how it evolved from the Walgan Tilly Project and other programs.

Chronic Care for Aboriginal People

In 2008, the Chronic Care for Aboriginal People program evolved from a number of existing initiatives such as the Aboriginal Vascular Health Program (2000) and the *Aboriginal Chronic Conditions Area Health Service Standards (2005)*⁴ to address the disparities of care particularly for heart disease, respiratory disease, diabetes and renal disease. The goals of the program were to: provide methods to improve access to chronic disease services for Aboriginal people; build working relationships between Aboriginal and chronic disease services in NSW; and identify and share best practice in meeting the needs of Aboriginal people with chronic disease.

Walgan Tilly Redesign Project

Clinical redesign is an improvement method that focuses on the patient journey in accessing emergency and elective care.⁵ The first Aboriginal specific redesign process, the Walgan Tilly Redesign Project, was established by NSW Health with clinicians, managers, patients and carers to increase the access of Aboriginal people to health services in public hospitals in NSW. The Project started in October 2007 and involved extensive consultation with staff, patients and carers across NSW. The findings from these consultations, as well as expert advice and reviews of the literature helped identify solutions to closing the gap in health outcomes between Aboriginal and non-Aboriginal people. These solutions included a model of care for Aboriginal people, greater emphasis on cultural awareness and sensitivity of services, and the integration of Aboriginal health and chronic disease into mainstream services.⁶ Each of the former Area Health Services, identified local solutions to their local issues. These solutions were implemented through all former Area Health Services and Justice Health over a 2-year period from July 2008 to June 2010.

As a result of the Walgan Tilly Redesign Project, the Chronic Care for Aboriginal People program specifically addresses four major diseases: heart disease, diabetes, chronic lung disease and kidney disease. Implementation was coordinated by the NSW Ministry of Health in collaboration with Local Health Districts and other stakeholders including local Aboriginal Medical Services and General Practice NSW.

Evaluation: Walgan Tilly Redesign Project

To assist in informing future planning and service development, the Walgan Tilly Redesign Project was evaluated over the period December 2010 to April 2011 to determine the impact of the Project on Aboriginal health inequalities, the effectiveness of the identified Walgan Tilly solutions and to assess the appropriateness of the approaches that were used.

The evaluation was conducted through extensive consultation (surveys and interviews) with stakeholders involved in the implementation of the project at both a state and local level. The evaluation confirmed the significant achievements and changes resulting from the Walgan Tilly Redesign Project. One of the findings was the importance of having a statewide focus on Aboriginal chronic disease. A number of factors that contributed to the success of the Walgan Tilly Project were identified and have broader applicability for the development and implementation of future Aboriginal health programs. They include:

- A statewide focus on Aboriginal chronic care and mandated key performance indicators
- Senior Executive and other Local Health District support
- Clinical redesign methodology
- Committed people working together effectively
- Central roles for Aboriginal Health Workers
- Identified lead coordination position
- Aboriginal community engagement
- Structured reporting timeframes
- Innovation and opportunity.

Recommendations of the evaluation

The evaluation identified factors that would have strengthened the statewide project, such as better governance and accountability, communication and consultation, consistency and timeliness of providing information and Aboriginal health lead roles. The evaluation also identified ways to continue to improve the delivery of chronic care services for Aboriginal people including engaging local communities and allowing time for working relationships to develop.

A model of care for Aboriginal people

The development of a model of care for Aboriginal people with, or at risk of developing, a chronic disease was one of the outcomes from the Walgan Tilly Redesign Project findings. Eight fundamental elements were identified as being essential to a framework for managing chronic

disease in Aboriginal communities: identification, trust, screening and assessment, clinical indicators, treatment, education, referral and follow-up (Figure 1).^{6,7}

This model complements existing structures that support improving health outcomes for Aboriginal people with, or at risk of developing, a chronic disease. The model based on statewide best practice:

- identifies gaps and opportunities at a local and state level to maximise existing resources
- provides an opportunity for new initiatives to address chronic diseases in Aboriginal communities
- provides a platform for partnerships with service providers within existing health and social networks.

The most significant difference between this model and other models of care is the importance placed on trust and mutual respect. Aboriginal people have suffered significant losses including family, land, identity and language. As a result, many Aboriginal people do not trust mainstream health services. The model of care provides an approach that is respectful of how difficult these factors are to overcome.

48 Hour Follow-up program

A recommendation arising from the Walgan Tilly Project was that all Aboriginal people aged 15 years and older, who were admitted to an acute care facility, and who had a chronic disease (heart disease, diabetes, chronic lung disease and kidney disease), should be followed up within 2 working days of discharge. 48 Hour Follow-up program has been implemented across the state in over 60 hospitals. The program's target is for 90% of eligible patients identified to be followed up within 2 working days.

Evaluation of the 48 Hour Follow-up program

A preliminary evaluation was conducted after 1 year of the program's implementation. The evaluation was conducted through patient and staff surveys, an analysis of data provided by the Local Health Districts and inpatient data from the health information exchange (HIE). The data analysis reviewed how well the 90% target was being met, how well hospitals were identifying eligible patients and the effect of re-admissions for people being followed up. A literature review on similar follow-up interventions was also undertaken.

Recommendations of the evaluation

The evaluation made a series of recommendations including:

- Reviewing key performance indicators and data sources and assessing the ability of Local Health Districts to locate eligible patients within their facilities to ensure all eligible patients are identified and offered follow-up.
- Examining hospital data for inconsistencies between data sources.
- Providing additional resources for clinical support and intervention as well as the expanded use of home visits,

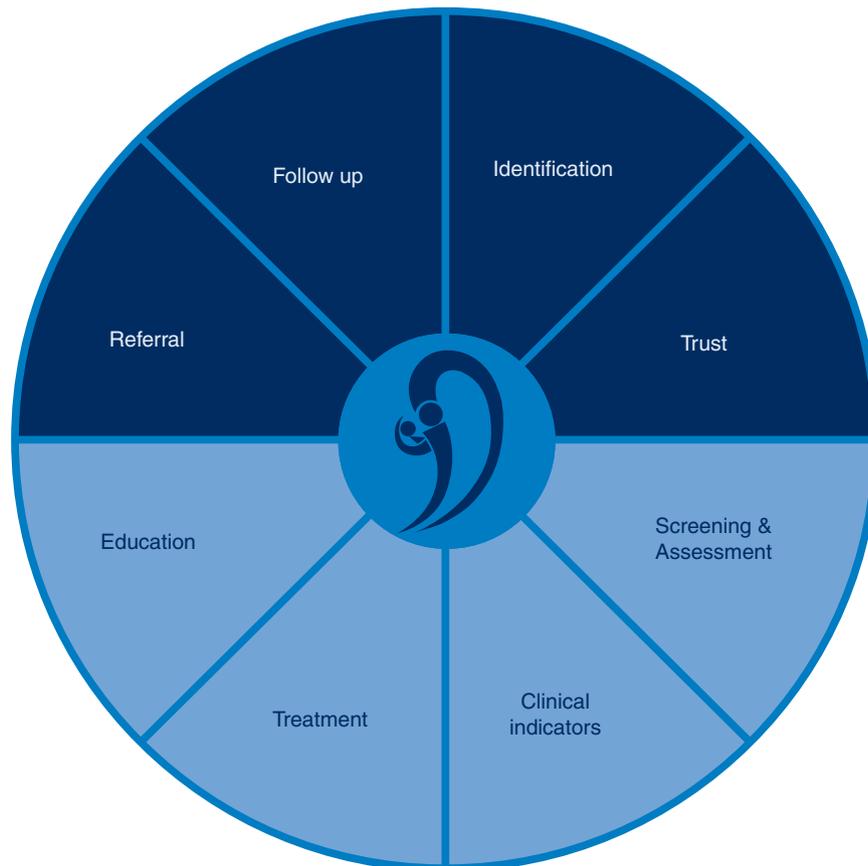


Figure 1. The model of care developed for the Chronic Care for Aboriginal People program.
Source: NSW Health Chronic care for Aboriginal people. September 2010.⁷

and the promotion of the service to eligible patients while they are in hospital.

- Expanding the program to specifically seek information about new problems and personal support available after discharge and investigating the benefits of home-visit follow-up.

Next steps

All Local Health Districts will adopt the new model of care for enhancement to the 48 Hour Follow-up program, which includes these components:

- dedicated positions for the 48 Hour Follow-up program
- having a central point of contact
- clinical supervision and support
- improved identification of eligible patients for follow-up
- increased capacity for home visiting in addition to a 48 hour follow-up phone call.

The evaluation of the enhanced 48 Hour Follow-up program is being funded through the *National Partnership Agreement on Closing the Gap in Indigenous Health Outcomes*⁸ and will be undertaken jointly between the Centre for Aboriginal Health and the University of Newcastle. The proposed intervention includes strategies designed to assist the health-care system to be more sensitive to the cultural, health and socio-economic needs of Aboriginal patients

with chronic disease. Guided by an advisory group, the intervention will consist of the following strategies:

- recommendations for clinicians involved in the patient's care for improving treatment adherence
- care delivered by the Chronic Care Worker while the patient is still in hospital
- care delivered post discharge by the Aboriginal Chronic Care Worker
- feedback to the health-care system.

Currently, the Local Health District Service Agreements include relevant indicators and strategic priorities relating to the chronic care program.

Connecting Care Program

The Chronic Care for Aboriginal People program is working closely with the Connecting Care Program which was introduced to former Area Health Services in 2009. The Connecting Care Program aims to reduce the progression and complications of chronic disease, improve the quality of life of people with chronic diseases and support their carers and families. It also aims to reduce unplanned and avoidable admissions to hospitals and improve the health systems capacity to respond to the needs of people with chronic diseases. Many Aboriginal people will be eligible, however issues around access, engagement and identification will

present as barriers for enrolment to this program. The NSW Health Primary Health, Community Partnerships and Chronic Disease Branch has endorsed the targeting of the Connecting Care Program enhancement funds to provide positions dedicated to Aboriginal enrolments in each Local Health District. It is anticipated that joint planning will occur between the Connecting Care Program, Chronic Care for Aboriginal People program, the Division of General Practice and Aboriginal Medical Services to integrate positions, programs and service provision.

Conclusion

The Chronic Care for Aboriginal People program, the culmination of many years of work, will continue to evolve to support flexible local approaches to chronic disease. The implementation of the 48 Hour Follow-up program across NSW has been a success of the program. Aboriginal people should feel safe and confident to access all health services and have choice in their own health care. To allow choice it is therefore important to maintain Aboriginal-specific services as well as ensuring mainstream services are better able to meet their needs.

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Eye health services for Aboriginal people in the western region of NSW, 2010

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Abstract: Aim: To assess the availability, accessibility and uptake of eye health services for Aboriginal people in western NSW in 2010. **Methods:** The use of document review, observational visits, key stakeholder consultation and service data reviews, including number of cataract operations performed, to determine regional service availability and use. **Results:** Aboriginal people in western NSW have a lower uptake of tertiary eye health services, with cataract surgery rates of 1750 per million for Aboriginal people and 9702 per million for non-Aboriginal people. Public ophthalmology clinics increase access to tertiary services for Aboriginal people. **Conclusion:** Eye health services are not equally available and accessible for Aboriginal people in western NSW. Increasing the availability of culturally competent public ophthalmology clinics may increase access to tertiary ophthalmology services for Aboriginal people. The report of the review was published online, and outlines a list of recommendations.

Aboriginal people experience a higher burden of eye disease than the general population in Australia. The National Indigenous Eye Health Survey found the rates of blindness in Aboriginal and Torres Strait Islander adults to be 1.9% which is 6.2 times the rate for non-Aboriginal

Australian adults, and low vision prevalence to be 9.4%, 2.8 times the rate for non-Aboriginal Australian adults.¹ The major causes of blindness in Aboriginal people are cataract, optic atrophy, refractive error, diabetes and trachoma.¹ Although 94% of vision loss in Aboriginal people is preventable or treatable, 35% of Aboriginal adults have never had an eye examination.¹

Eye health services at the primary health-care level involve health promotion, screening, treatment of minor problems and referral to eye health professionals. Secondary eye health services are delivered by optometrists and ophthalmologists and include diagnosis and treatment of major eye problems, excluding surgery. Tertiary eye health services are delivered by ophthalmologists and involve surgical interventions in the hospital setting.

The western region of New South Wales (NSW) comprises two Local Health Districts, Western NSW and Far West, and has the highest proportion of Aboriginal residents in the state (8.9%; 26 797 people).² Aboriginal people in the region are significantly disadvantaged over a range of social and economic indicators including unemployment, household income and educational attainment.³

NSW Health commissioned a review of eye health services for Aboriginal people in western NSW in 2010.⁴ The aims of the review were to describe and map existing eye health services, to estimate the accessibility of eye health services for Aboriginal people and to make recommendations for improving access to services. This paper describes the findings of this review.

Methods

A mixed methods approach, combining qualitative and quantitative data, was used to capture regional service utilisation data, as well as the perspectives and experiences of key service providers.

Data collection

Relevant peer-reviewed and grey literature was analysed to determine the epidemiology of eye health, national and state frameworks for eye health service issues and information related to eye health service providers. Non participant observation was undertaken in six eye clinics. Forty-three key eye health service providers, including program coordinators, optometrists, ophthalmologists and health services managers, were interviewed using standard questions and asked to provide information on services provided.

Cataract surgery rates were used as an indicator of access and uptake of eye health services, as people who have received cataract surgery must have successfully navigated the eye health-care pathway at the primary, secondary and tertiary level. The number of cataract operations received by residents of western NSW for the period July 2007–June 2010 was identified from the NSW Health Admitted Patient Data Collection. The Australian Classification of Health Interventions (7th edition) procedure code blocks 195–200 were used to identify a cataract procedure. Cataract surgery data were disaggregated for Aboriginal and non-Aboriginal people, and also for each Local Health District.

Data analysis

Cataract surgery rates (the number of cataract operations per million population per year) were calculated for Aboriginal and non-Aboriginal people in the region, using population data from the Australian Bureau of Statistics residential population estimates for each year.² Crude cataract surgery rates are reported, as these rates are the routine method for measuring and reporting cataract surgery coverage in the published literature.⁵ The number of additional cataract surgeries required for Aboriginal people each year in order for the cataract surgery rates for Aboriginal people to equal the cataract surgery rates for non-Aboriginal people within each Local Health District was also calculated.

Cataract surgery rates were also calculated for three sub-populations in the region: the five local government areas where public ophthalmology clinics are available; the seven local government areas where private ophthalmology clinics are available; and the ten local government areas where no ophthalmology clinics are available. The difference of proportions for cataract surgery rates for these three sub-populations was calculated with a chi-square test using SAS statistical software.

The information retrieved through the document review was synthesised and a thematic analysis was undertaken of the service provider interviews and observations collected during the clinic visits. These were examined according to predetermined themes concerning service availability, accessibility, coordination and uptake in the region.

As a routine review of services within NSW Health, using existing and non-identifiable data, this project did not require review by a Human Research Ethics Committee.

Results

Availability and mapping of eye health services

An overview of the services, locations and throughput for these service providers is outlined in Table 1.

Outreach eye clinics: The Outback Eye Service conducts integrated outreach eye services in seven locations in the region, delivering public eye clinics with optometry and ophthalmology. The Service also conducts eye surgery in Bourke four times a year, with case coordination and local post-operative follow-up.

Optometry: Aboriginal Community Controlled Health Services (ACCCHS), together with the International Centre for Eye Care Education, provide outreach optometry clinics in 36 locations across the region, held in local Aboriginal facilities. Regional Eye Health Coordinators based in the ACCCHS in Wellington and Walgett manage these clinics and provide case coordination, with optometrists sourced from the region and coordinated by the International Centre for Eye Care Education. Optometry in private clinics is also available across the region, where services are predominantly bulk billed under Medicare, and glasses can be accessed for free through the NSW Government Spectacle Program.

Ophthalmology: Ophthalmology clinics are run by the Outback Eye Service as described above. Broken Hill Base Hospital provides a regular public ophthalmology clinic. The Royal Flying Doctor Service conducts an annual ophthalmology outreach clinic in four locations. Ophthalmologists run private clinics in eight locations in the region, all in larger towns in the south east, and some will bulk bill clients on request. The availability of ophthalmology services is shown in Figure 1. Some areas with large numbers of Aboriginal people have no ophthalmology clinics available, or only private clinics where clients would mostly incur an up-front cost for the service.

Surgery: Public ophthalmology surgery is available at seven hospitals in the region.

Access to services

There are limited data available on the use of eye health services for Aboriginal people at the primary and secondary level. At the tertiary level, the cataract surgery rate in western NSW for 2007–2010 was 1750 per million population for Aboriginal people and 9702 per million population for non-Aboriginal people. The cataract surgery rate for Aboriginal people in the Far West Local Health District was 2338 per million population, and 1673 per million population in the Western NSW Local Health District (Figure 2).

For 2007–2010, an average of 39 Aboriginal people received cataract surgery annually in the Western NSW Local Health District. An additional 197 cataract operations for Aboriginal people would have been required annually on average in this period for the Aboriginal cataract surgery rate to equal the non-Aboriginal rate. In the Far West Local Health District seven Aboriginal

Table 1. The location, range of services provided and annual throughput of patients for eye health-service providers in western NSW, 2010

Level of eye care services	Provider	Services	Annual throughput	Location and frequency
PRIMARY	Aboriginal Community Controlled Health Services; Community health centres; General practitioners; Royal Flying Doctor Service	Primary health care	Figures not available	All locations
SECONDARY	Aboriginal Community Controlled Health Services (with International Centre for Eyecare Education) Far West Local Health District (Broken Hill Base Hospital) Outback Eye Service Maari Ma Health Aboriginal Corporation Royal Flying Doctor Service Private optometrists Private ophthalmologists	Outreach optometry clinics Public ophthalmology clinic Integrated outreach clinics (eye nurse, optometrist, ophthalmologist) Outreach eye clinics (ophthalmology registrar only) Integrated outreach clinics (eye nurse, optometrist, ophthalmologist) Ophthalmology outreach clinics (ophthalmologist and optical dispenser) Optometry Ophthalmology	1138 spectacles delivered to clients (2009–10) Figures not available 1582 occasions of service total 339 (21%) Aboriginal (2009) (2008): 195 clients seen total 135 (69%) Aboriginal (2009): 203 clients seen in total 111 (55%) Aboriginal 86 clients seen; (Aboriginal people not reported) (2010) Figures not available Figures not available	36 outreach locations in the region (4–12 times/year) Broken Hill Base Hospital (6 days/month) Bourke Brewarrina Walgett Lightning Ridge Cobar (4 times/year) Broken Hill Wilcannia Menindee Ivanhoe Tibooburra White Cliffs (1–6 times/year) Wilcannia Menindee (Once per year) Menindee Tibooburra White Cliffs Ivanhoe (Once per year) 19 locations in the region Bathurst Dubbo Orange Forbes Mudgee Gulgong Parkes Cowra
TERTIARY	Western NSW Local Health District Outback Eye Service with Western NSW Local Health District Far West Local Health District	Tertiary ophthalmology services Tertiary ophthalmology services Tertiary ophthalmology services	2634 cataract operations; 40 (1.5%) Aboriginal (2009–10) 60 eye operations annually 189 cataract operations 7 (4%) Aboriginal (2009–10)	Bathurst, Forbes, Dubbo, Orange, Cowra, Mudgee Bourke Broken Hill

Source: Maher L, Brown A. Eye health services for Aboriginal people. A review within the greater western region of NSW. Sydney: NSW Ministry of Health; 2011.

people received cataract surgery annually on average for the 2007–2010 period, and an additional 10 surgeries would have been required each year to close the gap in cataract surgery rates. For Aboriginal residents of western NSW, there is a relationship between the availability of a public ophthalmology clinic in their local government area of residence and the rate of access to cataract surgery (Figure 3). There is a significant difference in the cataract surgery rate for Aboriginal people from local government areas with public ophthalmology clinics, compared to local government areas with no clinics or private ophthalmology clinics (χ^2 test, $p < 0.001$).

Coordination of services

The key stakeholders interviewed reported that there is limited coordination between the key service providers in the region. In some locations there is strong cooperation between primary, secondary and tertiary providers to coordinate eye care services and the patient journey, however in other locations primary providers are unable

to facilitate access to secondary and tertiary services. There is no regional coordination of eye health services, or a structure which facilitates collaboration between service providers. The Local Health Districts have no comprehensive eye health-service delivery plans in place.

Monitoring and evaluation of services

Key eye health-service providers monitor their services using different monitoring and evaluation tools and varied reporting strategies. The data available cannot be combined to give an accurate picture of primary and secondary eye health services across the region, due to variations in indicators and data collection systems, as demonstrated in Table 1. There are no systems in place to monitor and evaluate eye health-services delivery for primary or secondary level services across the region. Tertiary level data are available from the Local Health Districts and are routinely monitored to ensure waiting-list benchmarks for surgery are being met, but these data are not analysed to ensure services are equitable.

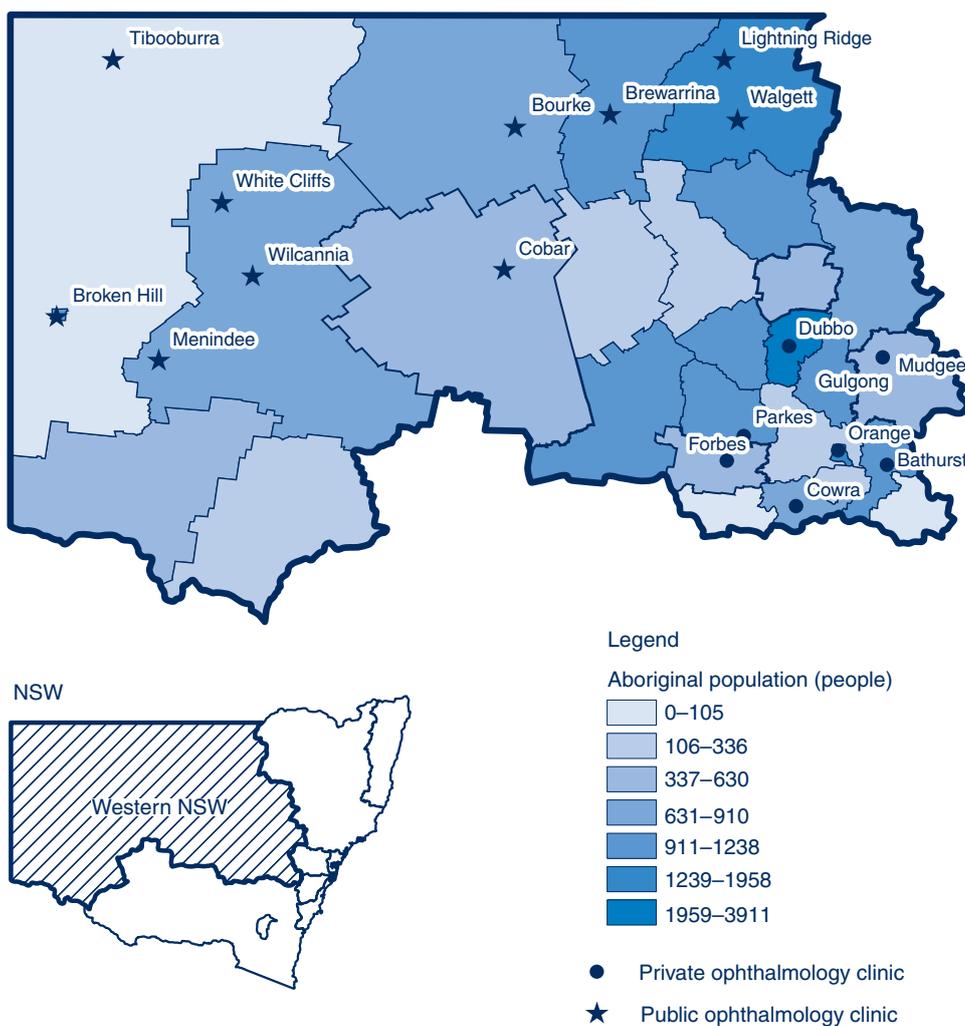


Figure 1. The location of public and private ophthalmology clinics in relation to the distribution of the Aboriginal population in western NSW, 2010. Source: Maher L, Brown A. Eye health services for Aboriginal people. A review within the greater western region of NSW. Sydney: NSW Ministry of Health; 2011.

Targeting services for Aboriginal people

A culturally competent health-care system acknowledges and incorporates the importance of culture, and adapts services to meet culturally unique needs.⁶ Of the services described, only those delivered by, or in partnership with, ACCHS are specifically tailored for Aboriginal people. The majority of eye health services available are mainstream services. The Outback Eye Service works in close partnership with the ACCHS and the Regional Eye Health Service Coordinators to improve access to the service for Aboriginal people, and 26% of their services are delivered

to Aboriginal people. No other services specifically modify their services to improve cultural competence for Aboriginal people. Many key service providers identified lack of cultural competency, particularly in private secondary eye health-service providers, as a significant barrier to accessibility of services for Aboriginal people.

Discussion

This review provides an overview of eye health services in western NSW for Aboriginal people. The focus was on secondary and tertiary services, and service delivery at the primary health-care level was not considered in depth. The review was also limited by the quality and availability of routinely collected service delivery data.

There is differential access to secondary and tertiary eye health services between Aboriginal and non-Aboriginal people in western NSW. There appears to be three main barriers for Aboriginal people accessing secondary eye health services in the region: availability, affordability and cultural competency. In many areas in the region that have a high number of Aboriginal people, there are either no ophthalmology services available, or only private clinics. This review demonstrated a clear relationship between the availability of public ophthalmology clinics and the uptake of cataract surgery for Aboriginal people. The availability of private ophthalmology clinics in an area does not increase uptake of cataract surgery, perhaps because private clinics present cultural and financial barriers for Aboriginal people. The National Indigenous Eye Health Survey identified some of the barriers reported by Aboriginal people that limited access to eye care when there was an eye problem, with the main reasons related to cost, availability and accessibility of services, perceptions around the severity of problems, and people having other

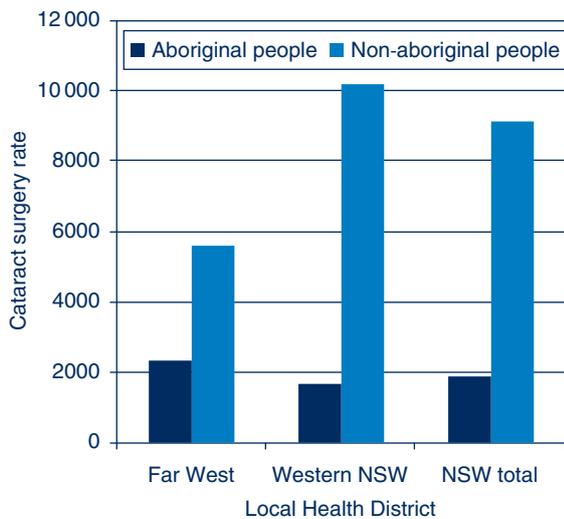


Figure 2. Comparison of average annual cataract surgery rates per million population for Aboriginal and non-Aboriginal people in the Far West and Western NSW Local Health Districts and for all NSW for the period 2007–2010. Source: Maher L, Brown A. Eye Health Services for Aboriginal People. A Review within the Greater Western Region of NSW. Sydney: NSW Ministry of Health; 2011.

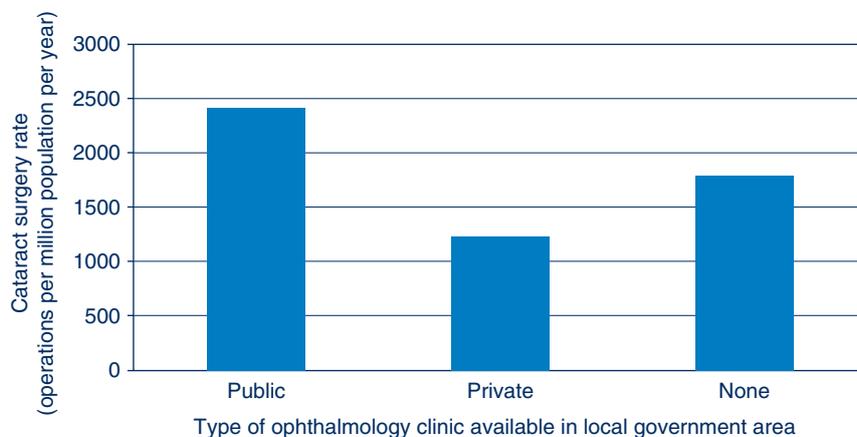


Figure 3. Comparison of average annual cataract surgery rates per million population for the Aboriginal population in western NSW, whereby local government areas are grouped according to the availability of public or private ophthalmology clinics, or no clinics available, for the period 2007–2010. Source: Maher L, Brown A. Eye Health Services for Aboriginal People. A Review within the Greater Western Region of NSW. Sydney: NSW Ministry of Health; 2011.

priorities.⁷ These reported barriers are consistent with the findings of this review.

The review identified two other key issues affecting eye health-service delivery, which are limited coordination between the main eye health service providers and incomplete monitoring and evaluation of eye health services in the region. Improved coordination and collaboration between the eye health-service providers in the region could result in improved access to services and eye health for Aboriginal people. Coordinated and integrated eye health clinics improve efficiency of services for patients,⁸ and one proposed solution involved the establishment of private-public partnerships between the Local Health District, private ophthalmologists, ACCHS, and the Outback Eye Service, whereby outreach eye clinics for Aboriginal people could be established in the private rooms of ophthalmologists. This is a potentially inexpensive initiative that could significantly improve access to and uptake of services for Aboriginal people at the secondary level. Additionally, improved monitoring and evaluation of services will allow information about service delivery and eye health outcomes to be available, and highlight the current inequitable access and uptake of services for Aboriginal people.

The report prepared for the Ministry of Health⁴ following this review process made a number of recommendations which are consistent with the recommendations in the road map for closing the gap in eye health for Aboriginal people developed by Taylor.⁹ These recommendations were: to enhance primary eye care as part of primary health care; to increase the availability and accessibility of secondary eye health services in the region; to maintain the availability of tertiary services; to improve coordination of eye care services between key providers; to improve cultural competence of eye health services; and to ensure appropriate monitoring and evaluation of eye health services for Aboriginal people in the region.

Conclusions

Improved availability of affordable and culturally competent services, improved coordination between service providers, and improved monitoring and evaluation of eye health services are recommended to close the gap in eye health for Aboriginal people in western NSW.

Acknowledgment

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Building a strategic approach to improve Aboriginal health research and evaluation in NSW

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Abstract: A 5-year strategic plan for Aboriginal health research and evaluation has been developed to support the NSW Ministry of Health in its efforts to create the evidence for what works in addressing the health disparity between Aboriginal and non-Aboriginal people. The plan has the following objectives: that all Aboriginal health policies and programs are evidence informed; that programs and strategies are rigorously evaluated and contribute to building the evidence for improving Aboriginal health outcomes; that new research evidence is generated for improving Aboriginal health outcomes; and that robust monitoring and accountability mechanisms in Aboriginal health are in place, with improved data quality. This paper describes the development of the NSW Ministry of Health's Aboriginal Health Research and Evaluation Strategic Plan 2011–15, including a review of the evidence and policy documents, facilitated planning sessions, and consultation with staff within the Population and Public Health Division of the Ministry.

Terminology

In accordance with NSW Health policy, Aboriginal and Torres Strait Islander people are referred to as Aboriginal in recognition of the fact that Aboriginal people are the original inhabitants of NSW.

Using research evidence to develop and evaluate health policy and practice has the potential to improve health outcomes and resource allocation.¹ More effective mechanisms are needed for generating policy-relevant research evidence, and for translating it into policy and practice.^{2,3} In Aboriginal health, the limited evidence-base for informing policy and practice is likely to contribute to the ongoing health disparity between Aboriginal and non-Aboriginal Australians.^{4,5} The evaluation and monitoring of programs and services that are delivered to Aboriginal peoples are important for developing evidence that can inform future policy and practice.

In March 2010, the Population and Public Health Division, NSW Ministry of Health, established an Aboriginal health research and evaluation function, recognising the need to increase the generation and use of research evidence, and for the rigorous evaluation of programs and services.⁶ Increasing investment in Aboriginal health in recent years through the Council of Australian Governments (COAG) National Indigenous Reform Agenda has also encouraged more evaluation to produce evidence of effective strategies to improve health outcomes.

In 2011, a strategic plan was developed to guide the Division's work in Aboriginal health research and evaluation. The plan focuses activities on contributing towards improving the health of Aboriginal people by facilitating evidence-based best practice, and meeting national and state government reporting commitments. This paper describes the development of the NSW Ministry of Health's Aboriginal Health Research and Evaluation Strategic Plan 2011–2015, its objectives and strategies, and highlights initial achievements in its implementation. The paper also draws on approaches nationally and internationally for future directions in policy-relevant research and evaluation.

Methods

Development of the Strategic Plan

The plan was developed in early 2011 over a 6-month period. A review of published research evidence was used to identify possible strategies and activities that could contribute towards meeting the objectives and overall vision. As well as being evidence-based, the plan reflects existing national and state policy commitments and is achievable within resources.

Strategic planning sessions and interviews

Strategic planning days were held to identify the aims, objectives and activities to be included in the plan. Interviews were conducted with senior staff in the Population and Public Health Division and other branches within the NSW Ministry of Health responsible for implementing state-wide Aboriginal health programs. Information was collected on:

- perceptions regarding the role of Aboriginal health research and evaluation in NSW Health
- strategies which could increase the use of evidence in policy and program decision making
- strategies which could improve the evaluation of programs in order to develop rigorous evidence on effectiveness
- how to build research and evaluation capacity.

Document review

Strategic health research documents were sourced by searching websites of health departments, research institutions and relevant non-government organisations in Australia and internationally, including a targeted search for policies and strategies in Indigenous health, and reviewed.

Draft versions of the plan were developed and feedback from the Population and Public Health Division was used to finalise the document.

Results

For successful implementation of the Strategic Plan, the following guiding principles are a necessity:

- A strong partnership with Aboriginal communities and the Aboriginal Community Controlled Health Services, with the other Divisions of the NSW Ministry of Health and Local Health Districts, as well as the research community particularly the Aboriginal health research community
- An organisational culture within NSW Health that values evidence, evaluation and research
- Staff who have the research capacity to use evidence to guide policy and practice
- A policy direction that supports and drives evidence-based practice
- A mechanism to lead, drive and coordinate statewide research and evaluation projects
- A mechanism that enables reporting and accountability to occur at local, state and national levels
- An effective communication and advocacy strategy across the health system.

Strategies included in the plan and progress with its implementation are outlined below.

Strategy 1: Increasing the use of evidence in Aboriginal health policies and programs

Increasing the use of evidence is a commitment under the *National Indigenous Reform Agreement*⁷ and the *NSW Health Population Health Research Strategy*.⁸

The activities to be undertaken are based on evidence of what is most likely to be effective: improving access to evidence from research; greater interaction between researchers and policy agencies; and improving organisational capacity for using research including policies, culture and skills.³

Knowledge translation meetings with leading researchers in Aboriginal health have been held to facilitate greater interaction between researchers and policy-makers. The meetings focused on evidence relevant to specific Aboriginal health programs. Evidence reviews have been completed to inform the development of programs, including a review of evidence-based chronic care models, a review of chronic disease interventions, and a review of appropriate evaluation methodologies to generate robust evidence on program effectiveness.

To improve access to published research evidence, the first phase in developing a web-based evidence repository was undertaken in consultation with Aboriginal health policy-makers and health-service providers. To improve organisational capacity, staff have received training and presentations on using research evidence, and receive weekly updates on newly published research in Aboriginal health, with access to full-text journal articles.

Strategy 2: Evaluating Aboriginal health policies and programs and building the evidence base of strategies that can improve health outcomes

Evaluation of Aboriginal health programs is a commitment under the *National Indigenous Reform Agreement*.⁹ Rigorous evaluation of health services and programs to generate evidence to inform policy is essential for improving health outcomes, and requires significant investment.¹⁰

In 2010 the Ministry began a review of existing and planned evaluations of all of its funded programs in Aboriginal health, and considered possible models available to bring research expertise to these programs. New evaluation projects have commenced using a range of models and scientific methods, including multiple-baseline interrupted time-series design,¹¹ randomised controlled trials and mixed-method approaches. The Centre has worked with other branches within NSW Health to develop evaluations in the areas of maternal and child health, maternal smoking cessation, injury prevention and chronic care and is currently evaluating the Chronic Care Service Enhancements Program. It has run training on evaluation techniques to staff, and to chronic care workers

in Local Health Districts and Aboriginal Community Controlled Health Services (ACCHS).

Strategy 3: Facilitating strategic research to develop evidence for improving Aboriginal health outcomes

The implementation of research findings into practice have contributed to increases in life expectancy and in quality of life for all Australians. Despite this, there is limited research evidence on effective strategies for improving the health of Aboriginal people.^{4,5} Collaborative, locally driven research partnerships are needed to drive research priorities and to undertake research. Developing the infrastructure, capacity and governance required to facilitate such research is an objective of the Ministry of Health, and a priority under the Population and Public Health Division's *Promoting the generation and effective use of population health research in NSW strategy 2011–2015*.⁸

The Ministry has made progress in supporting high quality, policy relevant intervention research projects to contribute to developing the evidence base in Aboriginal health. The Ministry is working in partnership with leading research institutions to trial the effectiveness of interventions in priority areas including maternal and child health, chronic disease prevention and management, injury prevention and improving cultural competency and Aboriginal identification within NSW hospitals.

Strategy 4: Providing epidemiological and performance reporting on Aboriginal health indicators, and improve data quality

Public reporting on population health and health service delivery can improve patient clinical outcomes and benefit the system as a whole.¹² To encourage effective reporting, the NSW Government has committed to produce an annual progress report on closing the gap between Aboriginal and non-Aboriginal people. The first of these reports will be released in 2012, and a summary report card was launched on National Close the Gap day, 22 March 2012 (see <http://www.health.nsw.gov.au/pubs/2012/aboriginalhealthreportcard.html>).

The Ministry of Health contributes to state and national Aboriginal health reporting through Health Statistics NSW,¹³ the National Aboriginal and Torres Strait Islander Health Performance Framework,¹⁴ the National Key Performance Indicators for Indigenous Specific Primary Health Care Services,¹⁵ and the Productivity Commission's *Overcoming Indigenous Disadvantage Key Indicators Report*.¹⁶ It has contributed to the development of national trajectories for closing the gap targets and to refining the methodologies used for calculating targets for the COAG *National Indigenous*

Reform Agreement. A number of epidemiological and health services studies that use routinely collected data are being supported, including a data linkage project as part of the 48-hour follow-up evaluation under the Chronic Care for Aboriginal People program which linked program participation data and hospital admissions data to assess the impact of the program on readmissions rates.

Evaluating the strategic plan

Achievements against the strategic plan will be assessed against increasing the use of evidence in policy-making, increasing in the number of high quality evaluations and research projects that address Aboriginal health priorities, an increase in the number of publications and reports that contribute to the evidence base in Aboriginal health, as well as measures of increased capacity, organisational change and collaboration with key stakeholders.

Discussion

The aim of the NSW Ministry of Health's Aboriginal Health Research and Evaluation Strategic Plan 2011–2015 is to focus the activities towards facilitating evidence-based practice by ensuring policies and programs are evidence-based and evaluated rigorously, and health indicators are monitored and reported accurately. The plan aligns with the NSW Health *Promoting the generation and effective use of population health research in NSW. A Strategy for NSW Health 2011–2015*.⁸

The implementation of the strategic plan will aim to continuously build on approaches for bringing together research, evidence, policy and health service delivery in order to improve health outcomes. In the area of evidence translation into policy (Strategy 1), emerging models such as that being developed through CIPHER, and the Canadian McMaster Health Forum may provide guidance in this area. The Canadian model coordinates forums with policy-makers, leaders, citizens and researchers for structured deliberations around specific health challenges using an evidence-based medicine and problem-based learning approach.^{17,18}

The evaluation of Aboriginal health policies and programs (Strategy 2) is consistent with a global trend to increase investment in rigorous designs for research and evaluation to provide recommendations for policy and practice. A useful approach has been developed by the Medical Research Council in the UK, which has produced guidelines for developing and evaluating complex interventions to guide policy agencies on how to design and rigorously evaluate evidence-based interventions.¹⁹

The Ministry will continue to maintain a strong focus on working with health services and population health programs to increase rigorous research and evaluation, and is trialling more feasible and collaborative designs which maintain high standards of scientific rigour.¹¹ The partnership between researchers, policy-makers, practitioners and Aboriginal communities and organisations will be critical for allowing evaluation designs to fit policy and program implementation, and to meet community priorities.

The aim to facilitate strategic research to develop evidence for improving Aboriginal health outcomes (Strategy 3) will contribute towards expanding the limited evidence-base in Aboriginal health on effective interventions.⁵ In Australia, the majority of funded research is investigator driven, therefore the evidence produced may not always provide useful information for policy makers who need to know what works in different settings to improve health service delivery and health outcomes;²⁰ and not how to best allocate resources towards competing priorities. Existing strategic documents relevant to Aboriginal health research also support the need for more strategic approaches for increasing policy-relevant research that provides evidence of what works.^{21,22} In October 2011 the NSW Aboriginal Health Partnership between the Aboriginal Health and Medical Research Council of NSW and NSW Health established a Research and Evaluation Sub-Committee to provide strategic direction to research and evaluation activities in Aboriginal health across NSW.

NSW has considerable expertise in the translation of evidence into policy and practice, and in population health intervention research. There is great potential to draw on this expertise to implement the Strategic Plan by supporting the development of effective and collaborative relationships between Aboriginal communities and the Aboriginal Community Controlled Health Services, researchers, policy-makers and health service providers to encourage greater use of evidence, stronger evaluations of services and programs, and the development of rigorous evidence of what works to improve the health of Aboriginal people in NSW.

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Sexually transmissible infections and bloodborne viruses in Aboriginal and Torres Strait Islander populations

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Nationally there are higher rates of sexually transmissible infections (STIs) and bloodborne viruses diagnosed in Aboriginal and Torres Strait Islander people than in other Australians. These infections are a major source of morbidity:¹ untreated chlamydia, gonorrhoea and syphilis can cause infertility, pelvic inflammatory disease, premature delivery and neonatal and post-partum infections, while hepatitis B and C can lead to liver cirrhosis and liver cancer. Untreated STIs can facilitate the transmission of human immunodeficiency virus (HIV), a lifelong infection with numerous health consequences. These infections are largely preventable and easily diagnosed; many STIs are easily cured.

Epidemiology

In the period 2005–2009, the age-standardised rates of chlamydia and syphilis notifications in Aboriginal and Torres Strait Islander people were 3.5 and 4 times higher, respectively, than rates in the non-Aboriginal population (excluding NSW and ACT where Aboriginal status was reported for 50% or less of diagnoses). In Aboriginal and Torres Strait Islander people, rates of STIs were significantly higher in rural and remote areas, which may reflect targeted STI screening programs in discrete Aboriginal communities. While rates of HIV diagnosis were similar in Aboriginal and non-Aboriginal populations, a higher proportion of the infections in Aboriginal Australians was a result of injecting drug use (21.3% compared to 2.8%). Rates of diagnosis of hepatitis B and C were three times higher in Aboriginal and Torres Strait Islander people than in other Australians. Rates of HIV and hepatitis B and C were higher in urban areas, which may reflect where people were tested.²

There is a need to improve the completeness and accuracy of reporting Aboriginal status in national data sets. With data missing from both regional and urban areas, there is the potential to underestimate the prevalence and morbidity associated with STIs and bloodborne viruses.¹

Challenges

Aboriginal and Torres Strait Islander people may be more vulnerable to STIs and bloodborne viruses because they: live

in high prevalence populations; are over-represented in custodial settings (with increased risk of contracting hepatitis C); and have a higher proportion of young people than in the general population (the median age in NSW is 21 years compared to 37 in the non-Aboriginal population).³ Many STIs and bloodborne viruses are asymptomatic so many of those with the infection may not seek medical care and consequently can pose a potential risk to others. Stigma and shame are associated with these infections further reducing the desire to seek medical care. Gaps in the workforce mean that some communities may lack access to culturally appropriate primary health-care services.¹

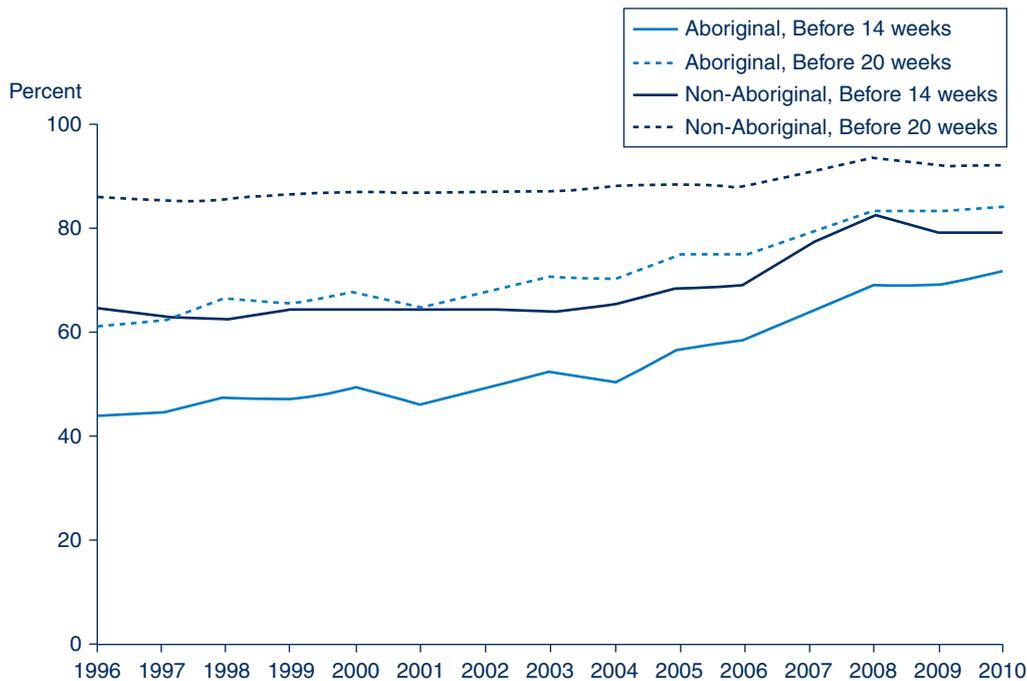
Strategies

The objectives of the *Third National Aboriginal and Torres Strait Islander Blood Borne Viruses and Sexually Transmissible Infections Strategy 2010–2013* include: decreasing the proportion of hepatitis C and HIV infections attributed to injecting drug use; increasing systematic testing and treatment of sexually active people aged 15–30 years; and improving young people's knowledge of STIs and bloodborne viruses. Needle and syringe programs and drug treatment services are recommended as well as the use of peer educators in delaying or preventing the onset of drug use and encouraging injecting drug users to be tested and treated for bloodborne viruses. Hepatitis B vaccination is recommended for all Aboriginal and Torres Strait Islander children at birth as well as a dose of immune globulin for infants whose mothers are hepatitis B positive.¹ Collaboration between Aboriginal and Torres Strait Islander communities and a range of government and non-government services including sexual health, mental health, drug and alcohol and Justice Health can improve the path to prevention, detection and referral for treatment and support.

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More Aboriginal mothers are attending their first antenatal visit before 14 or 20 weeks gestation in NSW



Over the period 1996 to 2010 in NSW, the proportion of Aboriginal mothers who attended their first antenatal visit before 14 weeks gestation increased from 43.8% to 71.3%. However, the proportion is still below that recorded for non-Aboriginal mothers at 79.6% in 2010.

The purpose of antenatal visits is to monitor the health of the mother and baby, provide advice to promote the health of the mother and baby, and identify antenatal complications so that appropriate intervention can be provided at the earliest time. Potential complications include antepartum haemorrhage, placenta praevia, placenta abruptio, prolonged rupture of membranes, gestational diabetes, threatened preterm labour, hypertensive disease of pregnancy and rhesus isoimmunisation, cervical incompetence, polyhydramnios, oligohydramnios, chorioamnionitis, threatened miscarriage, and problems secondary to multiple pregnancy.

Sources: NSW Perinatal Data Collection (HOIST). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Note: Antenatal care should commence as early as possible in pregnancy to ensure the best outcomes for the mother and the baby. All deliveries in New South Wales (NSW) were included. Due to under-reporting of Aboriginality to the Perinatal Data Collection, the true numbers are likely to be about 50% higher than shown. The level of under-reporting varies between Local Health Districts.

Further information and data on a range of public health indicators is available from the Health Statistics NSW website at: www.healthstats.nsw.gov.au.

Communicable Diseases Report, NSW, January and February 2012

Communicable Diseases Branch **NSW Ministry of Health**

For updated information, including data and information on specific diseases, visit www.health.nsw.gov.au and click on **Public Health** and then **Infectious Diseases**. The communicable diseases site is available at: <http://www.health.nsw.gov.au/publichealth/infectious/index.asp>.

Figure 1 and Tables 1 and 2 show notifications of communicable diseases received in January and February 2012 in New South Wales (NSW).

Enteric infections

Outbreaks of suspected foodborne disease

Nine outbreaks of gastrointestinal disease, thought to be due to the consumption of contaminated food and which affected a total of 64 people, were reported for January and February 2012. This is half as many outbreaks reported for the same period last year. These outbreaks were linked to restaurants or cafes (7), a private residence (1) and a conference (1). Of the nine outbreaks, five were identified through complaints to the NSW Food Authority, one was identified through an emergency department report to a public health unit, one was reported directly to a public health unit and two were detected through the monitoring of laboratory notifications of *Salmonella* clustered in time and space. Stool samples were tested in six outbreaks. *Salmonella* Typhimurium was found to be the cause in four of these outbreaks and *Salmonella* Give in one.

There were insufficient data to draw conclusions about the likely cause for six outbreaks. For three outbreaks an analysis of the foods consumed showed an association between illness and consumption of partially cooked egg products. In two of these outbreaks the cases exclusively consumed fried ice cream from Chinese restaurants. Fried ice cream is known to be a high-risk food for salmonellosis because the very quick cook time is unlikely to kill any pathogens present in the egg used to coat the ice cream ball. In the other outbreak, the illness

was diagnosed in those who had consumed scrambled eggs from a cafe. In this outbreak, eggs were pooled and stored at a temperature where salmonella could multiply. The dishes were then cooked to only a soft scramble, which meant the temperature was not sufficient to kill any *Salmonella* present.

Outbreaks of gastroenteritis in institutional settings

In January and February 2012, 63 outbreaks of gastroenteritis in institutions were reported, affecting 686 people, a similar number to the same period last year (61 outbreaks). Twenty-seven outbreaks occurred in aged-care facilities, 31 in child-care centres, 4 in hospitals and 1 in a camp setting. All these outbreaks appear to have been caused by person-to-person spread of a viral illness. In 27 (43%) outbreaks one or more stool specimens were collected. In 12 (44%) of these, norovirus was detected. Rotavirus was detected in 3 (11%) outbreaks.

Cryptosporidium was detected in one outbreak along with norovirus; this finding was thought to be coincidental during a viral gastroenteritis outbreak. In nine (33%) outbreaks all stool specimens were negative for pathogens. Results for three outbreaks are still outstanding.

Viral gastroenteritis increases in winter months. Public health units encourage institutions to submit stool specimens from case-patients for testing during an outbreak to help determine the cause of the outbreak (for further information see: *Guidelines for the public health management of gastroenteritis outbreaks due to norovirus or suspected viral agents in Australia* available at: <http://www.health.gov.au/internet/publications/publishing.nsf/Content/cda-cdna-norovirus.htm-1>).

Respiratory infections

Influenza

Influenza activity in NSW, as measured by the number of people who presented with influenza-like illness to 56 select emergency departments and the number of patients who tested positive for influenza at diagnostic laboratories, was low during January and February 2012.

In January, there were:

- 67 presentations to emergency departments (rate 0.4 per 1000 presentations)

- 21 cases of laboratory-confirmed influenza (rate 1.4 per 100 samples) including:
 - 7 (33%) influenza B
 - 6 (29%) influenza A – negative for pH1N1 – presumed to be influenza A (H3N2)
 - 4 (19%) influenza A (H3N2)
 - 4 (19%) influenza A (pH1N1).

In February, there were:

- 86 presentations to emergency departments (rate 0.4 per 1000 presentations)
- 45 cases of laboratory-confirmed influenza (rate 1.9 per 100 samples)
 - 20 (44%) influenza A – negative for pH1N1 – presumed to be influenza A (H3N2)
 - 15 (33%) influenza B
 - 9 (20%) influenza A (H3N2)
 - 1 (2%) influenza A (pH1N1).

Legionnaires' disease

There were 27 cases of Legionnaires' disease reported in January and February 2012. Of these, 21 cases were due to *Legionella pneumophila* and six cases were due to *Legionella longbeachae*. Despite careful interviews with case-patients for common exposures and a review of the potential sources of infection (including cooling towers), no common environmental sources were identified for these cases.

Legionella bacteria can cause severe pneumonia if aerosolised water or dust that contains the bacteria is inhaled by susceptible people. Some air-conditioning cooling towers have been identified as the source of Legionnaires' disease outbreaks in the past as they can become contaminated by *Legionella* bacteria which are then aerosolised. There are requirements for building owners to register their cooling towers with local councils and to maintain cooling towers to minimise the growth of *Legionella* bacteria in the cooling tower water. For further information, see: http://www.health.nsw.gov.au/factsheets/environmental/legion_control.html.

Vaccine-preventable diseases

Meningococcal disease

Four cases of meningococcal disease were notified in NSW in January and February 2012 (three in January and one in February); the age of the cases ranged from 0 to 50 years and included two cases aged under 5 years. One of these four cases was an adult from regional NSW whose death was notified in this period. All four cases of meningococcal disease were caused by serogroup B, for which there is no vaccine.

The number of cases has decreased from the same period in 2011, when there were 13 cases notified. The ages of these case-patients ranged from 0 to 60 years (five aged under 5 years) and 6 of these cases were caused by serogroup B.

It is recommended that a single dose of vaccine against meningococcal disease be given to all children at the age of 12 months as well as those individuals at high risk of disease.¹

Pertussis (whooping cough)

During January and February 2012, 1591 cases of pertussis were notified in NSW. This number is lower than that reported for the same period in 2011 (2698 cases). Caution should be exercised when interpreting these data because notifications of disease can be delayed.

Immunisation of babies remains an important strategy to provide protection for an age group most at risk of severe illness. A free vaccine administered to infants at 2, 4 and 6 months of age is available. It is currently recommended that the first dose be provided as early as 6 weeks of age and the subsequent booster dose at 3½ to 4 years.

Sexually transmitted infections

Syphilis

There were 65 notifications of infectious syphilis cases during January and February; this number has slightly decreased from the previous period of November and December 2011 with 73 notifications. The majority of notifications from January and February 2012 were in men aged between 20 and 50 years. Of these, notifications among young men aged 20 to 24 years have increased compared to the same period in 2011 (17% in 2012 compared to 3% in 2011).

Syphilis is a highly infectious sexually transmitted disease that is spread through vaginal, anal or oral sex through skin-to-skin contact. Syphilis is highly contagious during the primary and secondary stages of the disease when the sore or rash is present. Those most at risk include men who have sex with men, people with human immunodeficiency virus (HIV) infection, and Aboriginal people living in communities that are remote or have poor access to health services.

Reference

1. Australian Government Department of Health and Ageing and National Health and Medical Research Council. The Australian Immunisation Handbook. 9th ed. Canberra: Australian Government Department of Health and Ageing; 2008.

Figure 1. Notifications of selected communicable diseases, NSW, January 2004 to February 2012, by month of onset.

Preliminary data: case counts in recent months may increase because of reporting delays.

Laboratory-confirmed cases only, except for measles, meningococcal disease and pertussis.

BFV = Barmah Forest virus infections, RRV = Ross River virus infections,

Lab Conf = laboratory confirmed,

Men Gp C and Gp B = meningococcal disease due to serogroup C and serogroup B infection,

other/unk = other or unknown serogroups.

NB: Multiple series in graphs are stacked, except gastroenteritis outbreaks.

NB: Outbreaks are more likely to be reported by nursing homes and hospitals than by other institutions.

NSW Population	
Male	50%
<5 y	7%
5-24 y	27%
25-64 y	53%
65+ y	13%
Rural	46%

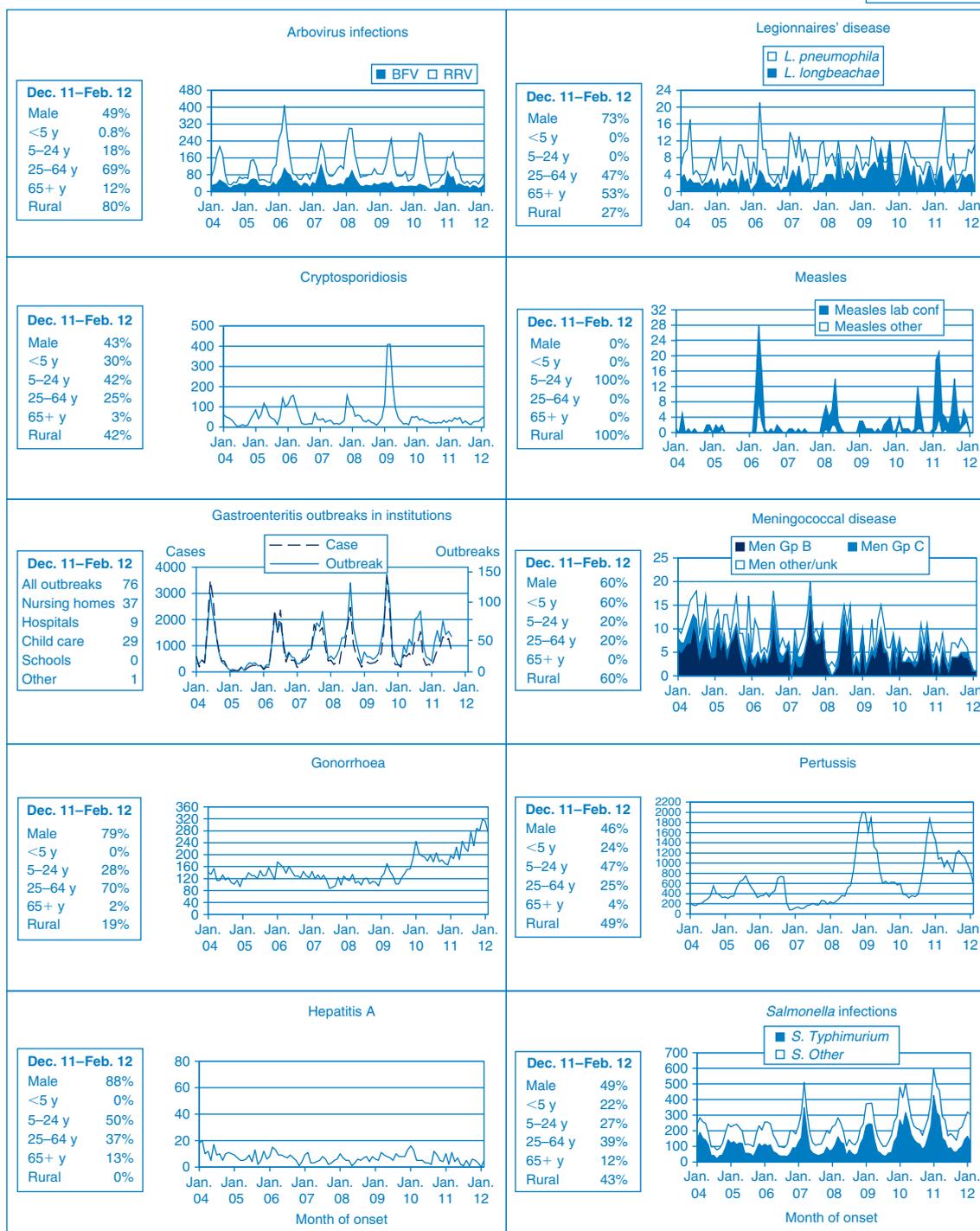


Table 1. Notifications of scheduled medical conditions received in January 2012 by Local Health District, NSW

Condition	Murrumbidgee NSW										Local Health District										Total	
	Southern NSW	Western NSW	Far West	Hunter New England	Northern NSW	Mid North Coast	Central Coast	Northern Sydney	Eastern Sydney	South Sydney	Illawarra Shoalhaven	Sydney	South Western Sydney	Western Sydney	Nepean Blue Mountains	Justice Health	For Jan ^b	Year to date ^b				
Bloodborne and sexually transmitted																						
Chancroid ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Chlamydia (genital) ^a	62	34	49	8	231	67	28	97	150	312	104	158	148	167	82	22	1719	1719				
Gonorrhoea ^a	3	2	-	2	18	4	3	5	29	122	9	62	29	42	10	3	343	343				
Hepatitis B - acute viral ^a	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	1				
Hepatitis B - other ^a	5	-	-	4	1	2	4	4	20	33	4	25	34	60	4	2	198	198				
Hepatitis C - acute viral ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	4				
Hepatitis C - other ^a	13	8	8	4	22	8	5	20	8	21	13	17	27	24	9	26	233	233				
Hepatitis D - unspecified ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1				
Lymphogranuloma venereum	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1				
Syphilis	-	-	-	-	-	-	-	-	3	11	8	8	2	4	-	-	37	37				
Vectorborne																						
Barmah Forest virus ^a	-	1	-	1	5	8	2	1	-	-	-	-	-	-	-	-	18	18				
Ross River virus ^a	5	2	2	2	8	5	-	3	2	4	3	4	2	1	2	-	31	31				
Arboviral infection (other) ^a	-	-	-	-	2	-	-	-	5	4	1	-	-	2	-	-	25	25				
Malaria ^a	-	-	-	-	2	-	-	-	-	-	1	-	-	2	-	-	5	5				
Zoonoses																						
Anthrax ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Brucellosis ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Leptospirosis ^a	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1				
Lyssavirus ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Psittacosis ^a	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1	1				
Q fever ^a	-	-	1	-	1	2	2	-	-	-	2	-	-	-	-	-	8	8				
Respiratory and other																						
Blood lead level ^a	2	-	1	-	2	1	-	-	-	-	-	-	1	5	1	-	13	13				
Influenza ^a	3	3	3	1	1	1	-	2	12	15	6	5	8	17	14	-	91	91				
Invasive pneumococcal infection ^a	3	-	2	-	4	1	-	1	4	7	1	2	4	1	2	-	32	32				
<i>Legionella longbeachae</i> infection ^a	-	-	1	-	-	-	1	-	1	-	1	-	-	-	-	-	4	4				
<i>Legionella pneumophila</i> infection ^a	-	-	-	-	1	-	-	-	1	1	-	2	-	1	1	-	8	8				
Legionnaires' disease (other) ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Leprosy	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Meningococcal infection (invasive) ^a	1	-	1	-	-	-	-	-	-	-	-	1	-	-	-	-	3	3				
Tuberculosis	-	1	-	-	1	-	-	-	1	2	1	1	-	9	1	-	18	18				
Vaccine-preventable																						
Adverse event after immunisation	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4	4				
<i>H. Influenzae b</i> infection (invasive) ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Measles	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	2	2				
Mumps ^a	62	21	85	6	72	76	27	42	72	58	48	34	91	115	46	-	855	855				
Pertussis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	2				
Rubella ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Tetanus	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Enteric																						
Botulism	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Cholera ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Cryptosporidiosis ^a	-	3	8	2	24	3	4	3	5	4	1	3	1	4	1	-	34	34				
Giardiasis ^a	5	7	8	2	24	3	4	3	31	22	5	12	4	26	11	-	167	167				
Haemolytic uraemic syndrome	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Hepatitis A ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Hepatitis E ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Listeriosis ^a	1	-	-	-	-	-	-	-	3	-	1	1	1	-	-	-	6	6				
Rotavirus ^a	2	1	1	-	9	1	12	11	9	9	19	10	7	7	6	-	57	57				
Salmonellosis ^a	11	6	4	2	33	23	12	11	42	45	19	49	43	38	15	-	353	353				
Shigellosis ^a	-	-	-	-	1	-	1	1	4	6	-	2	3	6	1	-	25	25				
Typhoid ^a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Verotoxin producing <i>E. coli</i> ^a	-	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-	4	4				
Miscellaneous																						
Creutzfeldt-Jakob disease	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Meningococcal conjunctivitis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				

^alaboratory-confirmed cases only. ^bincludes cases with unknown postcode. NB: Data are current and accurate as at the preparation date. The number of cases reported is, however, subject to change, as cases may be entered at a later date or retracted upon further investigation. Historical data configurations are included for continuity/comparison purposes and to highlight regional differences. NB: HIV and AIDS data are reported separately in the Public Health Bulletin quarterly. Data are reported as of Local Health District.

Table 2. Notifications of scheduled medical conditions received in February 2012 by Local Health District, NSW

Condition	Local Health District										Total						
	Murrumbidgee	Southern NSW	Western NSW	Far West	Hunter New England	Northern NSW	Mid North Coast	Local Health District Central Sydney	South Eastern Sydney	Illawarra Shoalhaven		Sydney	South Western Sydney	Western Sydney	Nepean Blue Mountains	Justice Health	For Feb ^b
Bloodborne and sexually transmitted																	
Chancroid ^a	57	33	83	11	296	83	27	119	171	271	218	212	182	72	20	1954	3673
Chlamydia (genital) ^a	3	7	7	4	38	12	7	7	22	113	71	21	30	10	1	346	689
Gonorrhoea ^a	5	2	2	—	4	—	1	4	30	17	34	46	43	4	2	196	394
Hepatitis B – acute viral ^a	7	5	16	4	27	13	8	26	14	15	29	42	25	12	26	286	519
Hepatitis C – acute viral ^a	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Hepatitis C – other ^a	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Hepatitis D – unspecified ^a	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Lymphogranuloma venereum	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Syphilis	—	—	—	—	4	1	—	2	1	6	4	2	6	—	—	28	65
Vectorborne																	
Barmah Forest virus ^a	10	—	1	2	5	17	5	1	1	—	—	—	—	1	—	34	52
Ross River virus ^a	2	2	9	6	13	8	3	—	1	—	—	—	1	1	—	54	85
Arboviral infection (other) ^a	—	2	1	—	—	1	4	4	6	4	2	4	1	1	—	31	56
Malaria ^a	—	1	—	—	—	—	—	—	—	—	1	2	—	—	—	6	11
Zoonoses																	
Anthrax ^a	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Brucellosis ^a	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	1
Leptospirosis ^a	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	1
Lyssavirus ^a	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Psittacosis ^a	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Q fever ^a	—	2	—	—	4	—	1	—	1	—	—	—	—	—	—	9	17
Respiratory and other																	
Blood lead level ^a	10	1	6	2	1	—	—	1	—	2	1	7	8	3	—	42	55
Influenza ^a	2	3	1	—	1	2	—	5	19	12	8	9	23	3	—	94	185
Invasive pneumococcal infection ^a	—	1	—	—	—	—	—	—	—	2	2	2	2	—	—	9	41
Legionella longbeachae infection ^a	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	2	6
Legionella pneumophila infection ^a	1	—	—	—	1	—	—	—	1	5	—	—	6	—	13	21	—
Legionnaires' disease (other) ^a	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Leprosy	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Meningococcal infection (invasive) ^a	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Tuberculosis	1	—	—	—	2	—	—	—	—	—	—	1	2	—	—	12	30
Vaccine-preventable																	
Adverse event after immunisation	—	—	—	—	2	—	—	—	2	—	—	—	1	—	—	5	9
H. influenzae b infection (invasive) ^a	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Measles	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2
Mumps ^a	—	—	—	—	—	—	—	—	—	—	—	1	2	—	—	5	15
Pertussis	30	34	56	3	62	56	28	28	64	74	38	70	101	31	—	736	1591
Rubella ^a	—	—	—	—	—	—	—	—	—	1	1	—	1	—	—	3	5
Tetanus	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Enteric																	
Botulism	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cholera ^a	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cryptosporidiosis ^a	4	5	11	1	28	1	6	51	39	6	3	3	9	4	—	67	101
Giardiasis ^a	—	—	—	—	—	—	—	—	—	—	12	11	31	12	—	220	387
Haemolytic uraemic syndrome	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hepatitis A ^a	—	—	—	—	—	—	—	—	—	1	1	1	—	—	—	1	4
Hepatitis E ^a	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Listeriosis ^a	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Rotavirus ^a	—	—	2	—	6	3	2	2	11	5	12	4	10	8	—	64	121
Salmellosis ^a	12	6	17	—	37	21	21	25	33	40	36	31	23	11	—	321	674
Shigellosis ^a	—	—	—	—	—	—	—	—	—	—	2	2	—	—	—	9	34
Typhoid ^a	—	—	—	—	—	—	—	—	—	—	—	1	2	—	—	6	6
Verotoxin producing <i>E. coli</i> ^a	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4
Miscellaneous																	
Creutzfeldt-Jakob disease	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Meningococcal conjunctivitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

^aLaboratory-confirmed cases only. ^bIncludes cases with unknown postcode. NB: Data are current and accurate as at the preparation date. The number of cases reported is, however, subject to change, as cases may be entered at a later date or retracted upon further investigation. Historical data configurations are included for continuity/comparison purposes and to highlight regional differences. NB: HIV and AIDS data are reported separately in the Public Health Bulletin quarterly. Data are reported as of Local Health District.

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